UNRAVELLING BHUTANESE TREASURES

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This is an account of some of the archival and digitisation activities carried out by me in the Kingdom of Bhutan in the last few years and not an academic paper on research findings *per se*. In the fashion of a report, it outlines the visions and objectives, the methodologies and procedures, problems and prospects of the textual exploration and digitisation projects undertaken in a few monastic establishments in Bhutan. The projects are themselves modest attempts on my part to imitate the stupendous works of archival exploration and digital reproduction which has taken place recently through establishments such as the Dpal brtsegs bod yig dpe rnying zhib 'jug khang in Lhasa and Tibetan Buddhist Resource Center in New York. Their works have significantly reshaped our understanding of the Tibetan literary landscape and the overall accessibility to and use of the materials.

Although this is not an analytical paper, I feel strongly that it is very pertinent for this article to be included in the proceedings of the IATS, especially as part of the panel, 'Ancient Treasure, New Discoveries', for these sorts of bibliographical and archival works have significant bearing on the state of Tibetan and Himalayan studies. I shall cite here three examples of recent archival and digitisation programmes which have left a direct impact on our understanding of the region's history in general and the history of the individual archives or establishments in particular in addition to making resources easily available.

1) The cataloguing and preservation works of Dpal brtsegs bod yig dpe rnying zhib 'jug khang at Drepung Monastery in Lhasa has revealed a great number of Kālacakra and *gzhan stong* literature, leading us to redefine our common perception that the *gzhan stong* tradition was persecuted and extirpated during the Dge lugs pa domination at the time of the fifth Dalai Lama (1617–1682), whose government *Dga' Idan 'pho brang* was initially based in Drepung.¹ The study of the library has helped us to gauge, more accurately, the havoc created by sectarian conflicts then and also to assess the cultural and literary destruction caused by the Cultural Revolution in the twentieth century.

¹ See article by Dradul Dorje in this volume and also for instance, Dpal brtsegs bod yig dpe rnying zhib 'jug khang 2004.

- 2) The Tibetan-Mongolian Rare Books and Manuscripts Project in Cambridge to digitise and catalogue primarily the Younghusband collections in the UK libraries has helped us re-evaluate the cultural significance of the Younghusband invasion of Tibet in 1903–4. The research has shed much light on the textual culture of Tibet and the extent of cultural transaction at the time of the invasion. It has also helped us unravel the underlying assumptions about the collections and assess their significance as a whole (see Diemberger, Phuntsho & Quessel this volume).
- 3) The digitisation of the manuscript collection at Gangtey monastery in Bhutan has clearly shown us that Gangtey, in its heyday, was one of the major monastic centres in Bhutan with a strong tradition of textual production. Unlike the other schools which succumbed to the expansion of 'Brug pa tradition in the midseventeenth century, it is clear that the Pad ma gling pa institutions thrived harmoniously with the new 'Brug pa Order (see Karma Phuntsho forthcoming).

These three instances sufficiently indicate the impact of digitisation and cataloguing endeavours on our studies even before the resources are fully utilised for an in depth research study. The full significance and contributions of an archival collection can only be appreciated after all individual titles, particularly those that are unique and rare, have been thoroughly studied. Thus, fully aware of such academic value and of the urgency evoked by the precarious situation some of the precious collections are in, I embarked on the exploration and digitisation of the collections I shall describe below.

The Bhutanese Temple Archives

The last fifty years perhaps saw the most tumultuous periods in the history of Tibetan Buddhist literature. First, the rich literary wealth of the Tibetan Buddhist culture faced a widespread destruction and dispersal during the Cultural Revolution and the subsequent days. This was then followed, particularly in recent years, by numerous projects of reproduction, documentation and digitisation of texts as corrective efforts to preserve and consolidate the damaged and fragmented texts. Himalayan literary heritage has never seen before such massive and systematic reproduction and distribution as that happening today through institutions such as the Dpal brtsegs bod yig dpe rnying zhib 'jug khang inside Tibet and Tibetan Buddhist Resource Center outside.

Bhutan, however, remained largely unscathed and untouched by these events which have reshaped the literary landscape of the Tibetan Buddhist world abroad. After the decline of Buddhism in Tibet, Mongolia and other Tibetan Buddhist countries, the Kingdom has come to be seen as the last bastion of fully-fledged Mahāyāna Buddhist tradition. Its long history of isolation and independence and its conservative cultural and political policies have combined to make Bhutan a unique repository of the cultural and religious wealth of the Buddhist Himalaya. Its secluded monasteries and temples today represent a literary treasure trove that is virtually unharmed and largely unexplored. Increasing access given to these institutions and repositories now makes Bhutan a strategic area for research that will lead to an enhanced understanding of the Himalayan Buddhist tradition.

It is with such a motive that I set out in 2005 to document the manuscripts in Gangtey² monastery in Bhutan, funded by the Endangered Archives Programme run by the British Library. Gangtey is the most prominent Rnying ma pa monastery in the traditional western Bhutan. Perched on a hill overlooking the Phobjikha valley that has now become renowned as a migration ground for the endangered black-necked cranes, Gangtey Gsang sngags chos gling was founded in 1613 by Rgyal sras Padma 'phrin las (1564–1642), the grandson of the famous Bhutanese saint Padma gling pa (1450–1521) in 1613. Local accounts have it that when Padma gling pa passed through the valley on one of his journeys, he prophesied that his treasure cycle of secret mantra teachings (gsang sngags kyi chos) would thrive on the hill (sgang steng) in the future (Bstan 'dzin chos rgyal n.d.: 18). Hence, the name.

The second Padma gling pa, Bstan 'dzin grags pa was born in the hamlet of Gan la just below Gangtey and subsequently became the spiritual father of the founder of Gangtey. It was at Bstan 'dzin grags pa's behest and through his own vision that Padma 'phrin las began the establishment of Gangtey around the beginning of the 10th rab byung and finished the inner sanctum of the current temple formally in 1613, Water Ox Year, three years before the arrival of Zhabs drung Ngag dbang rnam rgyal in Bhutan. After Padma 'phrin las's death, Gangtey continued to thrive under the supervision of his student, the third Padma gling pa Gsung sprul Tshul khrims rdo rje (d. 1654). However, Gangtey saw its heyday only during the life of Bstan'dzin legs pa'i don grub (1645–1726), the reincarnation of Padma 'phrin las, who emerged as a leading Rnying ma master in the country. Having a close relationship with the new political power in Punakha, Gangtey developed into a major Rnying ma establishment in the

² Gangtey is the most common phoneticised rendering of Sgang steng, a name which refers variously to a sub-district polity, a village and a monastic centre. Here, I simply use the name 'Gangtey' to refer to the monastic centre.

country. Padma 'phrin las's temple was also expanded into a large *rdzong* and a massive project of writing books took place during the time of Bstan 'dzin don grub resulting in the very rich collection of exquisite manuscripts which, along with the statues, paintings, and other religious relics, form the spiritual heart of Gangtey.

Gangtey's manuscript collection includes a set of beautifully executed kanjur, two sets of Rnying ma'i rgyud 'bum, and a large section of individual canonical titles including what is perhaps the world's largest Aṣ asāhasrikāprajñāpāramitāsūtra measuring 78.15 cm.by 35.5 cm. The library also contains a set of the Snar thang xylographic edition of Bka' 'gyur and woodblocks for some liturgical books from the Padma gling pa's cycle of rediscovered treasures. In addition to the canonical writings, Gangtey's holdings also include a wide range of texts on philosophy, history, religious rituals and practices. Written and collected mostly in the late 17th and early 18th centuries, the collection is of unique textual, artistic and historical value and holds immense religious significance for the local community.

Despite its considerable antiquity and integrity, the manuscripts are stacked in a temple hall, vulnerable to damage and even to possible destruction. An accidental fire from the habitual butter lamps could instantly reduce the entire library to ashes, as has been the case with many libraries through Bhutanese history. The local community has no archival skills or means to acquire them. Moreover, the market for religious artefacts in the West has led to commercialisation of these objects and consequently also to theft in similar remote areas. No proper survey has ever been done or efforts made to conserve them or reproduce them apart from my consultation of the books.

It was thus with the dual aim of preserving the manuscripts in digital surrogates and making copies available to wider scholarly domain that I undertook the digitisation of the manuscripts at Gangtey. The photography of the entire manuscript holdings at Gangtey took place between July 2005 and June 2006 under the aegis of the Gangtey Monastery, through the Aris Centre for Tibetan and Himalayan Studies and with generous financial assistance from British Library's Endangered Archives Programme. By the end of the project a complete digital copy of the entire manuscript collection has been produced along with a basic catalogue of the books. Copies of the books are now in Gangtey, the National Library and Archives of Bhutan and the British Library, where they may be soon available to scholars to consult.

The Gangtey project revealed to me both the urgency of digitisation of the archives in precarious conditions and the expedience of digital photography in duplicating and disseminating texts from secluded areas. It was also a highly

rewarding task to personally see many rare manuscripts and have the crumbling books copied before they degraded further. The successful completion of the Gangtey project led me to continue the digitisation at two other well known religious establishments: Drametse and Ogyen Choling. These two places, like Gangtey, also hold substantial collections which have grown through gradual accumulation and succeeded in remaining intact over centuries.

Drametse is located about eighteen kilometres uphill from the highway to Tashigang after making some twenty sharp bends on rough road carved out of a steep slope. Founded around 1511 by Ani Mchod rten bzang mo, the purported daughter/sister of the famous Bhutanese saint Padma gling pa (1450-1521), it is one of the major religious centres in eastern Bhutan. Mchod rten bzang mo, oral stories tell, was a beautiful and very pious woman who wished to only follow the path of a Buddhist renunciate but a son of the local chieftain in Bumthang persisted in having her hand in marriage against her wish. It was to escape his clutches and the subsequent worldly entanglement that she is supposed to have made her journey eastwards and finally settled in the solitude of the area, which she then named Drametse (*Dgra med rtse*), the crest without enemies.³

Since its establishment, the place has been the home of Drametse Chos rje family which has produced many eminent religious personalities including three Zhabs drung incarnations ('Jigs med grags pa (1791–1830), 'Jigs med nor bu (1831–1861) and 'Jigs med chos rgyal (1862–1904)) and the seventh Gangtey Sprul sku O rgyan bstan pa'i nyin byed.⁴ A vibrant home of Bhutanese religious elite, Drametse has thrived as a leading institution following the Padma gling pa teachings in the Himalayas. The incumbent head of Drametse is Gsung sprul Rin po che, the eleventh Padma gling pa incarnation, and the drum dance of Drametse, choreographed by Padma gling pa's grandson Kun dga' dbang phyug after seeing the dance in a religious vision, has recently been classified by UNESCO as an intangible world cultural heritage.

³ This is probably a later interpretation of the toponym as the Bhutanese historian Pema Tsewang (Pema Tshewang n.d.: 2) has noted. It is likely that the area was called Brah mi rtse even before Mchod rten bzang mo's time perhaps after the word Brahmi, which refers to the people and language of the Tawang Mon.

⁴ Drametse's notoriety for producing many reincarnate *bla mas* and the cynicism it generated in some corners is beautifully captured in the song: shar phyogs dgra med rtse la// bla ma mang po 'khrungs ca// 'khrungs ta bla ma 'khrungs ca// a drung mang se 'khrungs la//. At Drametse in the east, many lamas are born. Indeed, many lamas are born, but more horse-keepers are born.

The library of Drametse is located in the first floor of the main temple. It comprises large collections of manuscripts, woodblock prints and modern litho offset prints. Manuscripts includes the 46-volume *Rnying ma rgyud 'bum*, sixteen volumes of *Prajñāpāramitāsūtra*s and about a hundred and fifty volumes of miscellaneous titles including religious hagiographies, histories, liturgies, meditation manuals and philosophical treatises. Many of the books are written in *dbu med* script. Surprisingly, this has been the case with many books in all three collections of Gangtey, Drametse and Ogyen Choling. In modern Bhutan, *dbu med* is hardly ever written and only a few Bhutanese, most of them with some training in Tibetan monasteries, can read the *dbu med* script fluently. It is less likely that *dbu med* was once a prevalent script among Bhutanese virtuosi as it was in some parts of Tibet. The *dbu med* writing in Drametse probably indicates that the books were in a distant past brought from Tibet, with which Drametse had close religious links.

Like Drametse, Ogyen Choling is a prominent religious establishment in central Bhutan with strong ties to Tibet. Nestled on a hill top overlooking the upper Tang valley in central Bhutan, it is a seat of two famous Rnying ma pa saints: Klong chen pa (1308–1363), the famous philosopher, mystic and teacher of Rdzogs chen from central Tibet and Rdo rje gling pa (1346–1405) a prominent treasure discoverer from southern Tibet. Klong chen pa, the villagers claim, meditated in the cave near the village and consecrated the place as one of his eight *gling* or spiritual 'sanctuaries' in Bhutan. No specific mention is made of Ogyen Choling by Klong chen pa in his writings although, in his eulogy of Bumthang, he praises the valley for its natural beauty and sacred landscape.

A generation after Klong chen pa, Rdo rje gling pa, one of the five 'king' treasure discoverers like Padma gling pa after him, came searching for religious treasures in the valleys of Bhutan. It was he who left both a strong religious influence and a family line in Ogyen Choling. Today, Ogyen Choling is mainly a manor house of the family which claims direct descent from Rdo rje gling pa. It is the home of many distinguished individuals in Bhutanese history including Mtsho skyes rdo rje, the mid-nineteenth century governor of Tongsa, Bla ma Nus Idan rdo rji (1930–85), the last monk scholar of the family and Ashe Kunzang Choden, the acclaimed modern writer. The establishment has managed to thrive until our times with its rich spiritual heritage still intact. Ashe Kunzang Choden, the daughter of the manor, has now converted the towering central edifice of the manor complex into a magnificent museum with all the religious and cultural artefacts preserved and displayed in their original context.

The temple and library of Ogyen Choling house an impressive collection of manuscripts and woodblock prints of several hundred titles ranging from

pilgrimage guides to philosophical treatises. It also includes a beautifully executed eighteen-volume set of Rdo rje gling pa's writings, which is enshrined in a box in the inner sanctum of the temple. Professor Samten Karmay catalogued the collection in 2003 highlighting some of the rare works of Zhang Bla ma 'gro ba'i mgon po (1123–93), Lho brag Grub chen nam mkha' rgyal mtshan (1326–1401), Dben sa Blo bzang don grub (1504–1566) and Byang chub brtson 'grus (1817–57). He has classified the books into five broad categories of the rNying ma, Sa skya, Bka' brgyud, Dge lugs and Non-religious writings. With funding from the Endangered Archives Programme and using the same technology and methodology as the Gangtey project, these books in Ogyen Choling and the entire collection of manuscripts at Drametse were photographed between July 2006 and June 2007.

The Work and Technological Process

My first quest for rare manuscripts began in 2003 after Rob Mayer asked me to find him copies of two vajrakīla tantras from Rnying ma rayud 'bum manuscripts in Gangtey, Bhutan. I was travelling across Bhutan with my teacher H.H. Penor Rinpoche then and we halted at Gangtey monastery, where His Holiness conducted a public dbang ceremony for over ten thousand people. H.H. Penor Rinpoche was on his way to give a month long public sermon in Bumthang at the invitation of the Queen Mother of Bhutan and H.E. Gangtey Tulku, the incumbent head of Gangtey monastery. During the morning in Gangtey, I visited the monastic library and saw the set of very elegant Rnying ma rayud 'bum manuscripts, which I later labelled Gangtey NGB B after discovering a second, and an earlier, set. I immediately requested Gangtey Tulku to allow me to photograph them but his response, as I had expected, was a vague 'no' with a polite smile. Although he understood the virtues of documentation of such rare books and the subsequent use of the photos for academic study, he was equivocal about the overall benefit of such reproduction.

His attitude betrayed the influence of the religious conservatism associated with the traditional restrictions on esoteric knowledge, typically held by traditional lamas, and the general cultural protectionism which the Bhutanese state strongly promulgated.⁵ There was understandably an anxiety that sacred texts may be 'disturbed' by the act of photography and that once in digital

⁵ A few weeks before our encounter, he was mildly reprimanded by the Minister for Home Affairs for footage of the inner chamber of the deity (*mgon khang*) which appeared in a documentary produced in the UK. The footage was obtained by the crew during his absence using the influence of the local commissioner.

form, their sanctity could diminish through wide and easy replication and that restrictions traditionally imposed on the access to esoteric content of the books such as *Rnying ma rgyud 'bum*, which fall within the highest category of Buddhist tantric teachings, may become inapplicable. Such open access can be paramount to the serious violation of tantric *samaya* precepts generally known as the open proclamation of secrets (*gsang bsgrags*). Less evident was perhaps also the concern that such malleable and reproducible forms as the digital images would undermine the unique ownership of the texts and the socioreligious legitimacy and authority which comes with it. Moreover, he was also aware of the problematic and often controversial nature of the academic study of such sacred texts as critical scientific analyses carried out by the academics and their conclusions often contravened the long-held traditional beliefs and stories about the texts and their applications.

I was fully aware of such cultural sensitivities and religious agenda and was only keen to play the game correctly with investment of more time and effort. Besides, the prevailing circumstances with a hectic schedule necessitated by H.H. Penor Rinpoche's teachings did not allow me to pursue the permission immediately. After the sermons in Bumthang were over, I returned to Gangtey and persisted with my requests to photograph the *Rnying ma rgyud 'bum* giving all the good reasons I could think of then. At times, I had to travel long distances and wait for long periods to see Gangtey Tulku and convince him of the importance of digitisation of the collection. It was a long test of my patience and persuasive powers. Gradually after a many weeks, I managed to win his confidence and gain his consent to document the *Rnying ma rgyud 'bum* collections. My association with prominent religious masters such as H.H. Penor Rinpoche, who was then the head of Rnying ma tradition, and my own stature among the Rnying ma monastic communities as respected scholar and author helped my dogged determination.

With his permission in place, I made my first journey to photograph the books on a gruelling country bus that was crammed with farmers and their enormous sacks of rice. I was equipped with many packets of presents, the latest Minolta camera, a Thinkpad laptop, CDs and batteries. The bus broke down twice with punctures before we finished the ten hour ordeal on a road which normally took five hours. At Gangtey, I stationed myself with one of my former colleagues from India, who was then teaching in the monastic college as

⁶ One of root precepts (*rtsa ba'i dam tshig*) of esoteric *vajrayana* Buddhist practice is to refrain from divulging the secret teachings and practices to people who have not been initiated.

an abbot. Khenpo Penjor Tsering, like the four other monastic lecturers at Gangtey, has finished his nine year academic training in a Tibetan monastery in India and a three year retreat in Bhutan, and was subsequently appointed as a monastic abbot (*mkhan po*). Their friendship and support has been a great asset for my work, from finding the caretaker of the monastic library and assistant monks to providing me with meals on time.

The images I provided for Rob Mayer in 2003 were produced almost single-handedly using a Konica Minolta Dimage F200. I spent approximately ten hours every day taking photos of the voluminous books. The station was basic with a board on which to place the texts and a tripod with the camera. The tripod unfortunately did not have a latch for the camera. So, each morning I had to bind the camera to the tripod with sticky tape, which slowly melted as the camera got heated towards the end of the day. I initially focused using the LCD screen but soon found out that the view on LCD screen did not exactly match with the resultant images. I also discovered later that the view from the view finder did not match the images produced. Hence, the best method was to set the camera and texts in the right position to produce a sample and thereafter maintain the same position.

Yet, the greatest challenge by far was the lack of electricity in Gangtey. Besides being remote, the valley is also known for being a roosting ground for the endangered black-necked cranes. Overland electric cabling in the valley was seen as detrimental to the migrating birds and thus electricity was deferred until cheap underground cabling or some other alternatives could be found. The monastic college ran a power generator for three hours in the evening. It was during this short period with electricity that I had to not only charge the computer fully but also create backup CDs. The scarcity of electricity taught me how to run my computer power efficiently and at times also obstructed the photography seriously as I ran out of computer power to download the images from the camera cards. Even worse, the power from the generator was not strong enough to recharge the camera battery. There was another generator in the village which its owner kindly lent to me. I carried the heavy generator on my back to the monastery but unfortunately, this one could not recharge the batteries either. Thus, my supply of camera batteries fully exhausted, I had to return from Gangtey after a couple weeks.

The following spring, I returned to Gangtey armed with a big bag of lithium CR-V3 batteries and resumed the photography of the forty-six volumes of *Rnying ma rgyud 'bum*. Wrapped with a blanket in the cold temple hall, I took almost a thousand images each day making optimal use of day light. After completion of each volume, I downloaded the card onto the computer, checked

the images for any defects and finally saved them in multiple copies. All the images were produced in a fine jpeg format of roughly 1.20MB, which Rob Mayer later claimed were the best copies of *Rnying ma rgyud 'bum* produced until then.

However, it was only in November 2004 that a major initiative to digitise the entire collection of manuscripts in Gangtey was planned. The Lisbet Rausing Charitable Trust gave the British Library a generous fund to start the Endangered Archives Programme in order to document the endangered archives around the world and competition for funds had just been announced. Although I learnt about the competition for funds just two days before the deadline, my application for funds to photograph the entire collection of manuscripts at Gangtey was successful. With funding in place, I worked, once again, on getting permission, written this time, for documentation of the entire collection of manuscripts. Thanks to my prior work in building the connection and confidence, the permission came through without much delay.

Funded by the Endangered Archives Programme, I set off to Gangtey on my third trip to photograph the entire collection of manuscripts under the aegis of the Gangtey Tulku. I was fully equipped this time with two laptops, two Canon EOS20D cameras, quantities of rechargeable batteries, camera cards, card reader, external hard drives and DVDs for storage. In Gangtey, we built an outdoor station and began photography in earnest with the assistance of six monks from the monastic college. Two of the monks prepared the folios for photography, two laid the texts on the board and two of them took the pictures. At lunch break and in the evening, two of them helped me download the images from the cards and sort the files into order and make back ups. To overcome the problem of electricity, I also made financial contributions to the monastic college for acquiring a much larger kerosene generator, which was able to recharge the batteries and run for several hours.

When we finished the photography of the entire collection of manuscripts in Gangtey, we had produced 1400GB of data comprising over 275,000 images of some 500 volumes of texts. The images were produced in duplicate copies of jpeg and raw formats, each with the size of roughly 2MB and 7MB respectively. The jpeg are good for easy access and distribution. Although the file size is not large, the quality of the images are over and above what is required for reading purposes and are also easily transferable. Raw images on the other hand are in a proprietary format and thus require specific software to open them. However, they retain the maximum data captured by the camera and also allow shooting parameters to be changed even after the photo has already been

taken. Using the proprietary software, they can be converted into other formats such as tiff, jpeg and gif of varying capacities.

With the successful documentation of the manuscripts at Gangtey, I applied to the EAP for more funds to carry out similar archival projects at Drametse and Ogyen Choling using the same procedure and equipments. Permission to photograph the library at Drametse was obtained by Lama Nidup Dorji, who worked on the project as a researcher and is a good friend of Sungtrul Rinpoche, the current head of Drametse. The project was initially delayed due to the absence of Sungtrul Rinpoche at Drametse monastery. Without his presence, we could neither gain access to the library nor set up the work station. Work, however, began in earnest as soon as he returned and gave us both access to the library and permission to employ monks as assistants. It took the team a few days to set up the station, arrange for the best lighting conditions and train the monks in arranging the folios and working with the camera and computers. Lopen Phuntsho Gyeltshen, a learned monk with considerable computer skills, whom we took with us, was a great asset as the monks in Drametse neither had good understanding of the overall significance of the project nor any technical expertise. Lopen Phuntsho Gyeltshen continued to work with us also for Ogyen Choling the following spring.

Drametse's remoteness posed an immense difficulty to our work although we were very fortunate that electricity has reached Drametse just before the project started. Located some twenty-five hours drive from Thimphu, we had no easy access to technical support and the much feared trouble came in early September 2006, when we began to face problems with one of the cameras and external hard drives. The camera showed the mysterious 'Error 99' sign. We had already experienced this problem with one camera while working in Gangtey and had it sent to the Canon Service Centre in Bangkok earlier in the summer of 2006. The Canon experts could not identify the cause of this malfunction but they replaced the entire mirror box, shutter frame and three other interior parts. With this repair, the first camera was returned and it worked without any problem.

The malfunction of the camera severely hindered the photographic work. With the 'Error 99' signal, the camera refused to take pictures when the shutter was released. If it did take pictures, the pictures came out fuzzy, dark, out of focus and distorted. The nearest professional service centre was in Bangkok. Thus, work continued precariously with only one camera but with longer sessions and enhanced diligence. However, driven by desperation and his habitual monkish inquisitiveness, Phuntsho Gyeltshen, the technocrat-monk, discovered that the camera worked intermittently when 'basked' in the hot

sun. He also found out that the resultant pictures were brighter and clearer when the optical view finder aperture is masked. Thus, he used the faulty camera for a couple of hours a day, giving it a rest in sunshine after all brief photographic sessions. My suspicion was that the cameras were succumbing to general wear and tear. Even Canon engineers may not have imagined such unusually intensive use as that to which we have subjected the cameras for months on end in exceptionally harsh conditions.

The technical problems were further exacerbated when one of the hard drives started recording pictures which were disfigured and blurred by bright patches and rainbow-like lines. Fortunately, this problem was noticed before substantial data was lost. We had also experienced this problem with one hard drive during the Gangtey project. The faulty hard drive was returned to the agent in Thimphu, who in turn sent it back to its Singaporean source. The malfunction of the hard drive put the team under severe storage constraints until the agent could send new external hard drives, ordered from Singapore.

Despite the equipment failures and the impossibility of obtaining any technical support due to the sheer remoteness of the location, the team persisted with the photography, making the best use of the functioning equipment. By the end of December, the entire collection of Drametse had been photographed and by the end of January the photos had been checked and multiple copies of the collection stored on DVDs and hard-drives. There is now a digital copy of the entire manuscript holdings of Drametse amounting to about 560GB of 50,359 jpeg images and the same number of raw images. A total of 295 volumes containing about 891 titles have been captured in digital format. The Drametse collection comprises 551GB, 891 titles and a total of 99,602 files. It includes a manuscript set of the sixteen volume 'Bum, a set of the forty-six volume Rnying ma rgyud 'bum and the 702 miscellaneous titles listed under Gsung thor bu. The digital documentation of the Rnying ma rayud 'bum and the subsequent access scholars will gain is an invaluable contribution which the project will make to Tibetan and Buddhist studies. This is the latest edition to come to light in addition to the two versions from Gangtey and five other versions which are already available in the West. Some two hundred versions were said to have existed in the Himalayan world before 1950 but only nine versions are known to survive. We are proud and delighted that the last three versions have been revealed and are now made accessible for the first time through the Aris Trust EAP projects.

The process of photography at Ogyen Choling went very smoothly compared to Gangtey and Drametse. In addition to experience from Gangtey and Drametse which helped us prepare for the work, we received willing co-

operation and support from the hosts. Ashe Kunzang Choden, the driving force behind the conversion of Ogyen Choling manor complex into a museum and its preservation, understood the significance of digital archives and importance of their manuscript collection in the wider scholarly world. The cordial support we received from her and her family helped us immensely in getting easy and complete access to the books and in undertaking photography.

We set up our station on a south-facing balcony with perfect light for the photography. Learning from our experience in Gangtey and Drametse, we installed transparent plastic curtains to diffuse direct sunlight. Like the two previous places, we also used grey cloths as background for the texts. Like a grey scale card, the grey background was good for balancing colour and setting a customised white balance. We also began to use transparent pins on which to rest the texts although it was difficult to use them consistently as we kept losing the pins. At Ogyen Choling, we also introduced the use of two measuring tapes running vertically and horizontally across the board in order to record the physical dimensions of the folios.

Work at Ogyen Choling, however, was not without hurdles. To begin with, there was no electricity. Power lines were only being installed when we were there. Fortunately, the new generator we took with us supplied power without fail. Not only could we recharge all our computers and batteries, we were also able to show the village movies in the evening. The generator however did not end our problems but presented us with a new and totally unexpected challenge. It generated more power than our equipment could take so that one evening, to our horror, all our computer adapters were smouldering. We managed to disconnect the power in time and, following the advice of an electrical technician, learnt to diffuse the input of electrical power from the next day. The night that we turned off the power after seeing the smouldering adapter was my most anxious night in field. I went to bed with the worry that all computer and camera power adapters and cables may have been damaged beyond repair. To my great relief all the adapters worked well the following day.

The camera that had not worked in Drametse had its interior mirror and lens changed in Bangkok and worked efficiently in Ogyen Choling but the other camera started to show the 'Error 99' message. Even when it took pictures, they showed dark patches randomly. Thus we had to stop using this camera. Fortunately, the new camera EOS400D I acquired for the Cambridge project was available and we could continue the work uninterrupted using two cameras. By July 2007 we had finished photographing the entire collection of manuscripts in Ogyen Choling covering some 1700 titles. Among them are

eighteen volumes of manuscripts of Rdo rje Gling pa's teachings, which were enshrined in a wooden box in the inner chamber of the tutelary deity. Following Prof. Samten Karmay's catalogue, the manuscripts in Ogyen Choling are classified into the four main Tibetan Buddhist traditions of Rnying ma, which comprise the major bulk of the collection, Bka' brgyud, Sa skya and Dge lugs, secular topics and miscellaneous fragments. We discovered among these a great number of extremely interesting titles including biographies and ritual texts which were not known to exist.

For both Drametse and Ogyen Choling, Lopen Namgay Tsering also produced a basic catalogue using the detailed manuscript catalogue system in an xml editor programme. After the completion of the photography of manuscripts in Ogyen Choling, we also started to photograph the substantial collection of woodblock prints in the library, which were not within the scope of our project for the Endangered Archives Programme, as a service to Ogyen Choling and as a token of our gratitude. The woodblock prints are not all either rare or endangered copies but we have discovered many significant works in the course of our project work. The photography of the woodblock prints could not be completed during the project period but we plan to do so in the future in order to respect the integrity of the collection in Ogyen Choling.

Continuing the work we have done in Bhutan for the Endangered Archives Programme and our work for the Tibetan-Mongolian Rare Books and Manuscripts in the UK, I am now working on a project to document and consolidate the books associated with the Padma gling pa tradition. This tradition, started by the most eminent Bhutanese saint Padma gling pa and continued and expanded by the three lines of his disciples, incarnations and descendants, ranks as a major Buddhist school in Bhutan. While bearing an important religious, cultural, social and political significance for Bhutan, the tradition has also spread to other parts of the Tibetan Buddhist world. Funded by a grant from the British Arts and Humanities Research Council awarded to the University of Cambridge, this project will include the digital conservation of manuscripts in the main establishments associated with the Padma gling pa tradition, textual input of the core collection and compilation of a detailed catalogue for the manuscripts and a book on the history of the tradition.

The Significance of the Work

The collections we have photographed are undoubtedly outstanding literary holdings in their size, quality, antiquity and integrity. For the world at large and Bhutan in particular, they represent an astounding heritage of enormous value and significance. The digital reproduction of the collections fulfilled our dual

objectives of conserving the unique collections in digital surrogates and of making the rare books available in the domain of scholars and monks.

The books we have photographed hold a strong religious significance for the local communities. As corpuses of the precious teachings of the Buddha and his followers, and therefore embodiments of the soteriological paths and practices which lead one to enlightenment, the books are not viewed merely as reading materials. As in the cults of the books such as Perfection of Wisdom Sūtras and the Lotus Sūtra in ancient India and China, the Bhutanese communities view the books as holy objects which are repositories of sacred dharma. Just as a stupa represents the enlightened mind of the Buddha, the books are the scriptural representation of the Buddha's speech, *gsung rten*, the receptacle of the Buddha's words. Furthermore, the physical creation of the ancient books is often seen as the holy act of a master in the past. Thus, the books are cherished more as a powerful relic than just as a literary work.

They are worshipped, circumambulated and prostrated to, and people touch them with their heads to receive blessings. They are produced with great care to very high artistic and scribal standards, and are carefully wrapped in 'clothes' and stored in the upper sanctums of the temple space, from where they radiate blessings or spiritual power upon the whole environment. Occasionally they are paraded through the valley to bless the environment and protect it from natural calamities such as drought and flood. They are read in order to accumulate merit, remedy illnesses, dispel obstacles or as a funerary rite. Similarly, a large number of texts, mostly belonging to the esoteric tantric form of Buddhism, are utilised by the priests as manuals for tantric rituals and practices and they are also studied by the virtuosi in efforts to understand and practise their content with the aim of reaching enlightenment.

The religious role of these books, as I have explained elsewhere, is multifarious and very important in the host communities. The use of text permeates all facets of the Himalayan Buddhist culture and it is only through the full understanding of the role, use and spiritual value the books hold for the communities to which they belong, that one can sufficiently appreciate their social and religious significance. The digital photography of the texts has ensured that these textual relics and artistic productions are safely preserved, albeit in a malleable digital format, using the most advanced form of technological tools.

In addition to the religious significance it holds for the host communities, the reproduction of the collections has immense benefit for the scholars given the codicological, historical, philological and bibliographical use of the books. Digital reproduction has made these rare and remote resources easily

accessible. The books, which previously could not be accessed for geographical and political reasons, can now be read at the click of the mouse. Besides access, the digital copies are also highly portable, convertible and adaptable according to the needs of one's study. The digital zoom facility, which allows easy magnification of small print, is one example of the advantages of digital copy even over the original book.

One of the main benefits of the access to a collection such as Gangtey's for the scholars is its use in codicological study and textual criticism of Tibetan Buddhist literature. The collections in Gangtey, Drametse and Ogyen Choling offer hitherto unavailable editions for comparative and critical study of texts. Rob Mayer and Cathy Cantwell have already made good use of the *Rnying ma rgyud 'bum* collections from Gangtey and Drametse to do a stemmatic study of two tantras: *Phur pa bcu gnyis* and *Phur bu mya ngan las 'das pa'i rgyud*. Through their stemmatic analysis they have traced the textual variants in the different editions and are closer to their aim of constructing a genealogical tree which would show the relationship between the various editions of the *Rnying ma rgyud 'bum* corpus (Mayer 2004).

However, the academic value of these collections far exceeds such use in codicology and textual comparison. For the wider scholarship on Bhutan and the Himalayas, the collections, as literary and historical tools, help us gauge the literary, religious, social and political standing and economic prosperity of the respective monastic establishments and their societies as a whole. I have discussed in another article (see Karma Phuntsho forthcoming) the case of Gangtey's collection and its reflection of Gangtey's religious and socio-political pre-eminence in mid-seventeenth- to mid-eighteenth-century Bhutan. Similarly, I have also briefly illustrated at the beginning of this paper the impact of such bibliographical and archival study on our general understanding of the literary, cultural and religious landscape of the subject area even before we study the individual titles in the collections.

In addition to the expedience in appraising the religious and socio-historical circumstance in which they were produced and preserved, the collections also have an obvious benefit to a scholar. The collections contain a substantial number of books that were not known in the scholarly domain although what new information these books will reveal has yet to be seen. Thus, the literary strength and value of these collections can be only fully appreciated after a proper study of the collections and the production of a comprehensive catalogue. Until such a time, we may not quite know the full story of the benefits we reap from exploring and photographing these collections of rare books.

BIBLIOGRAPHY

- Bstan'dzin Chos rgyal. n.d.n.p. *rGyal kun khyab bdag 'gro ba'i bla ma bstan 'dzin rin po che legs pa'i don grub zhabs kyi rnam par thar pa ngo mtshar nor bu'i mchod sdong.* Manuscript.
- Dpal brtsegs bod yig dpe rnying zhib 'jug khang. 2004. 'Bras spungs dgon du bzhugs su gsol ba'i dpe rnying dkar chag. Beijing: Mi rigs dpe skrun khang, 2 vols.
- Karma Phuntsho (forthcoming). Gangtey's Untold Treasures. *In* Sorenson, Phuntsho, et al. *Written Treasures: A mirror of the past and a bridge to the future.* Thimphu: National Library of Bhutan.
- Mayer, Rob. 2004. *Textual Criticism of Rnying ma'i rgyud 'bum tradition.* Paper presented in the 10th seminar of IATS, Oxford.
- Pema Tshewang. n.d.n.p. Dgra med rtse dgon pa chags tshul dang rnga 'cham kyi lo rgyus mdor bdus su bkod pa. Monograph.