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**ABSTRACTS**



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## CONTENTS

(Abstracts arranged by alphabetical order of surname or Buddhist first name)

Monisha Ahmed (Mumbai)— <i>From Benaras to Leh - the trade and use of silk-brocade</i>	1
André Alexander and Andreas Catanese (Leh)— <i>The Leh Old Town project: conservation, challenges and discoveries</i>	1
Dave Bainton (Bristol)— <i>Lost in transmission: the impact of schooling on indigenous knowledge</i>	2
Enzo Gualtiero Bargiacchi— <i>Ippolito Desideri's first comments about Ladakh</i>	2
Shahzad Bashir (Stanford)— <i>"The Nurbakhshis of Baltistan and Ladakh: observations on historical sources"</i>	3
Martijn van Beek (Aarhus)— <i>A state of decline? Ladakhi perspectives on the present state and future of Buddhism</i>	4
Chiara Bellini (Bologna)— <i>The mGon-khang paintings in dPe-thub</i>	4
Alessandro Boesi (Milan)— <i>The Goddess of Phokar and the Festival of Flowers</i>	4
John Bray (Tokyo)— <i>The Ladakhi lo-phyag mission from Leh to Lhasa in regional perspective</i>	5
Francesca Cardi— <i>The methods of gathering the best medicinal plants</i>	5
Valentina Cataldo (Bologna)— <i>Music in Tibetan Buddhist rituals in Ladakh</i>	5
Col R. T. Chacko (Bangalore)— <i>Black-necked cranes (Grus nigricollis) breeding in Ladakh and the problems they face</i>	6
Anuradha Chaturvedi (New Delhi)— <i>Representation of the significance of cultural resources in 19th century Ladakh and Zangskar through a study of two pictorial, cognitive route 'Wise' maps in the British Library collection.</i>	6
Juliane Dame (Heidelberg)— <i>Food security in Ladakh: subsistence-oriented resource utilisation and socio-economic transformation</i>	8
Pascale Dollfus (Paris)— <i>Who are "Those of the Black Castle"? Discussing the past of a nomadic group inhabiting the south-eastern edge of Ladakh</i>	8
Dorje Dawa & Davide Geneletti (Trente)— <i>Developing an environmental GIS database for a remote mountainous area. A regional-scale study in Ladakh, Indian Himalaya</i>	9
Kaneez Fatima (Kargil/New Delhi)— <i>Women and Agriculture in Ladakh</i>	10
Kim Gutschow (Williamstown, Ma.) Dr. Padma Drolma (Leh)— <i>Birth in Ladakh and Zangskar: from home to hospital</i>	10
Georgios T. Halkias (Oxford)— <i>Modern Pasts: Tracing the 1679 Tibet-Bashahr Treaty</i>	11
John Harrison (Wales)— <i>Conservation of architectural heritage in Ladakh</i>	11
Wolfgang Heusgen (Graz)— <i>New knowledge about the construction of the Wanla temple</i>	11
Neil and Kath Howard (Birmingham)— <i>Historical relics in the rGya valley, eastern Ladakh</i>	12
Blaise Humbert-Droz— <i>Can Ladakh's biodiversity withstand the impact of tourism?</i>	12
Christian Jahoda (Vienna)— <i>Spiti and Ladakh in the 17<sup>th</sup>-19<sup>th</sup> centuries: views from the periphery</i>	13
Kacho Mumtaz Ali Khan (Kargil)— <i>History of Chiktan Razi Khar (castle) and its preservation and reconstruction</i>	13

Deborah Klimburg-Salter (Vienna)— <i>"The Life of the Buddha at Alchi, in regional perspective"</i>	14
Gerald Kozicz (Graz)— <i>A 12<sup>th</sup> century stupa in the neighbourhood of the monastic complex of Nyarma</i>	14
Richard V. Lee (Buffalo)— <i>Emerging infectious diseases and the integrity of indigenous cultures and regions</i>	15
Erberto Lo Bue (Bologna)— <i>Notes on Buddhist funerary practices in Indian Tibet at the dawn of the 21st century.</i>	16
Filippo Lunardo— <i>Tshogs zhing: a wall painting in the new 'Du khang of Spituk (dPe-thub)</i>	16
J. Seb Mankelaw— <i>Seeds of change: contemporary agrarian trends in Central Zangskar.</i>	17
Petra Maurer (Heidelberg)— <i>Sa bdag and tortoise. A survey of the tradition of geomancy in Ladakh</i>	17
Martin A. Mills (Aberdeen)— <i>Charting the Shugden interdiction in Ladakh</i>	17
Mohammad Saleem Mir (Kargil)— <i>Sustainable agricultural production in Ladakh</i>	18
Arik Moran (Oxford )— <i>"Shifting alliances? British imperialism on the Ladakhi frontier"</i>	18
Nawang Tsering Shakspo (Leh)— <i>Ladakhi folkdance</i>	19
Sunder Paul (Leh)— <i>The conservation of the Alchi chos-'khor</i>	20
Poul Pedersen (Aarhus)— <i>Traditionalism in Ladakh: Marco Pallis and Abdul Wahid Radhu</i>	20
Phuntsog Dorjay (Hannover)— <i>Introduction of Buddhism and Buddhist art in Ladakh: a study through ancient rock art.</i>	20
Mohammad Raza (Kargil)— <i>The Pakistani shelling of Kargil 1997-1999</i>	21
Elena De Rossi Filibeck (Rome)— <i>Reflections on the cultural meaning of the Ladakhi marriage songs: a case study on the Wamle bag ston gi glu.</i>	21
Syed Bahadur Ali Salik (Skardo)— <i>Balti folksongs with reference to Ladakh</i>	21
Abdul Ghani Sheikh (Leh)— <i>Traditions of Sufism in Ladakh</i>	22
Harjit Singh (New Delhi)— <i>Changing Ladakh: some observations on environment, society and population parameters of Leh district</i>	22
Patrick Sutherland (London)— <i>The Spiti Sound Archive project: recording the Hirrip</i>	22
Tashi Ldawa Thsangspa (Leh)— <i>Distribution of petroglyphs in the Ladakh region: a comprehensive documentation and conservation initiative</i>	23
Tashi Morup (Leh)— <i>The Changthang Wildlife Sanctuary Act and future concerns among nomads</i>	24
Balwant Thakur (Jammu)— <i>Changing trends in the performing arts of Ladakh</i>	24
Christopher C. Wahlfeld (Buffalo)— <i>Fieldwork: patterns of reproductive health at two hospitals in the Leh district of Ladakh</i>	25
Sonam Wangchok— <i>Inventory of cultural resources in Ladakh</i>	25
Bettina Zeisler (Tübingen)— <i>Ci songkhani dra (onomatopoeia): giving a voice to the event</i>	26

## ABSTRACTS

### **Monisha Ahmed (Mumbai)—*From Benaras to Leh - the trade and use of silk-brocade***

This paper examines the trade and use of silk-brocaded fabrics, known as *gos-chen* or *gya-ser*, from Benaras (now Varanasi) to Ladakh. *Gos-chen* refers to a silk fabric richly patterned with Buddhist symbols such as the eight lucky signs, the thunderbolt and the bell, dragons, clouds and lotus flowers. The fabric is also characterized by the use of gold and silver thread.

For centuries *gos-chen* was made in China but some time around the middle of the 19<sup>th</sup> century Muslim weavers in Benaras began to reproduce the Chinese brocade with its Buddhist motifs and patterns. From Benaras most of the silk-brocade was taken to Kalimpong, which was a large commercial market on the trade route between India and Tibet, and from there it went to countries in the Himalayan Buddhist world such as Ladakh. The brocade was also carried to Ladakh by traders, who travelled through Kashmir or the Punjab to reach the region. Though brocade continued to come from China, that from Benaras was more popular because it was considered the finest and was priced lower. Their deep colours and elaborate designs of scrolling lotus flowers, clouds, dragons, and the eight lucky signs of Buddhism, made them very appealing. However, the high cost of these fabrics made them symbols of prestige and their use was restricted to the clergy, royalty, and nobility. Silk-brocaded fabrics were largely used to make robes, belts and hats for both men and women, as well as monastic banners and the borders of *thangkas* (scroll paintings). At monastic festivals special brocade robes were made for the monks who performed the sacred dances. The common people, who could not afford the high prices, used just a bit of it as a border around the cuffs of their sleeves and the slits on either side of their robes. These were kept to wear at special occasions such as festivals, weddings, and religious ceremonies.

Silk-brocaded fabrics from Benaras are still very much in demand in Ladakh, and though the trade routes have closed they continue to come to the region. Their use is also no longer confined to a section of people as many more are able to afford them. In addition, cheap imitations made from synthetic fabrics come from China and are widely available and extensively used by the people.

This paper looks at the historical context of the trade in silk-brocades from Benaras to Ladakh, and explores how this trade first started. It presents how these fabrics are made in Benaras and discusses their various uses in Ladakh. Finally, it examines the contemporary status of the trade and the continued importance of silk-brocades in the lives of Buddhist Ladakhis.

### **André Alexander and Andreas Catanese (Leh)—*The Leh Old Town project: conservation, challenges and discoveries***

During the four years of the Tibet Heritage Fund's urban conservation work in Leh, carried out in cooperation with the Hill Council, we have investigated several dozens of historic buildings and have restored over half a dozen. During that time we got a good understanding of the original structure of historic Leh and the town's urban development. The paper will include a few points about the designs of homes and

temples in old Leh. We also made some interesting discoveries, such as the oldest wall-paintings in Leh (15<sup>th</sup> century) underneath a coat of white-wash in the Red Maitreya Temple, and a 17<sup>th</sup> century women's mosque in Chutayrangtak.

We have also observed how the lifestyle, for which the buildings were originally designed, has changed, putting demands on our building rehabilitation work. Finally, we have sadly also observed how the old social fabric, with the strong community institutions, is rapidly unravelling.

**Dave Bainton (Bristol)—*Lost in transmission: the impact of schooling on indigenous knowledge***

This paper seeks to explore the different ways that indigenous knowledge is being impacted upon by Western forms of knowledge and schooling in Ladakh. Taking as a starting point conversations with a range of indigenous knowledge practitioners in Saboo village (blacksmiths, Amchis, grinding mill owners, monks, farmers, 'lorepas' (the cow masters), the 'chur-pons' (the waterlords) amongst others, the analysis offers the concept of a 'knowledge habitat' to make present a landscape within which to locate and understand an embodied view of indigenous knowledge.

Many of the indigenous practices were found to be in a fragile state, and in danger of being lost within a generation. I have used the expression 'lost in transmission' to describe what I see as the main problem - that such knowledge is simply not being 'practised' by the younger generation.

A consideration of the nature of the indigenous knowledge habitat offers a way to understand the mechanisms of how changing patterns of livelihood associated with development have created ruptures not only in the physical practices of indigenous knowledge, but also through changing relationships to time, and community that themselves are deeply implicated in this loss.

This analysis sees these ruptures to be created through the different articulations of a development discourse of which schooling was seen to be a key component. This paper understands schooling to be not only a key site to understand these processes, but perhaps more importantly, a key mechanism for the creation of these ruptures in patterns of social life and livelihood.

From this standpoint, the paper goes on to analyse schooling practices in terms of the ways that they function to privilege Western knowledge hegemonically vis-à-vis indigenous knowledge, characterising schools as places of suffering, of nullification, dislocation, codification and paradox.

Perhaps the most critical of these processes are the forms of dislocation that a hegemonic discourse of a 'good school' engenders, as students are dislocated, in search of a 'good school' not only from family and village, but thereby dislocated too from the indigenous knowledge communities that would make knowledge transmission possible.

**Enzo Gualtiero Bargiacchi—*Ippolito Desideri's first comments about Ladakh***

The reception of the knowledge contributed by the 18<sup>th</sup> century Jesuit Ippolito Desideri on Ladakh and Tibet has had a curious history. Desideri's considered

assessments, the fruit of years of study, remained hidden for centuries within the manuscript collections of the Rome archives. On the other hand, his initial impressions of Ladakh, which were recorded in a private letter, were widely known, having been published in the popular *Lettres édifiantes et curieuses* and then reproduced in all the main collections of travel narratives appearing in the 18<sup>th</sup> and 19<sup>th</sup> centuries.

For these reasons, together with a complex series of unfavourable events, the missionary's work has not been highly regarded, even though many important works have stressed its importance: these include the works of Puini and De Filippi, and—following Tucci's directions—Petech's edition of Desideri's travel narratives, and Toscano's translation of his Tibetan works. Perhaps the fact that—with the exception of De Filippi's text—these works were written in Italian is one reason why Desideri is not more widely known, together with the mistaken view that, after more than two centuries, his analysis of Tibetan could no longer be valid, and that his first impressions on Ladakh deserved no further consideration. Only a few scholars such as Janet Rizvi have appreciated Desideri's narrative as a precious source of information on Ladakhi history, particularly dwelling upon the wool trade and Ladakh's transport links with Kashmir.

This paper reviews the missionary's impressions of Buddhism in Ladakh, and its relations with Tibet. It places Desideri's contributions in the context of earlier Western descriptions of Ladakh, starting with Francisco de Azevedo's account in the 17<sup>th</sup> century which was undoubtedly the first, even if it appeared after a long delay. In particular, the paper discusses Desideri's discovery of the *om āḥ hūm* mantra and of the three jewels (*triratna*), finally giving due recognition to the analysis of the first European to deal with these subjects.

**Shahzad Bashir (Stanford)—“*The Nurbakhshis of Baltistan and Ladakh: observations on historical sources*”**

The Nurbakhshis are a distinctive Islamic group with a historical presence spread over six centuries in Iran and Central and South Asia. The first Nurbakhshi community in South Asia was established in Kashmir in the late 15<sup>th</sup> century, from where the movement spread to Baltistan and Ladakh in the 16<sup>th</sup> century. The Nurbakhshis currently constitute significant proportions of the Muslim populations of these regions.

In my paper, I will utilize reports about Nurbakhshis from the 16<sup>th</sup> century to the present to reflect on the characteristics of Muslim sources for discussing the late medieval to modern history of these regions. The Nurbakhshis' founding ideology attempted to deemphasize the division between Sunnism and Shi'ism in favor of a new interpretation of Islam rooted in Sufi ideas and practices. Until quite recently, almost all sources reporting on the Nurbakhshis were written by non-Nurbakhshis, who generally tended either to rationalize or to criticize the Nurbakhshis' ideological distinctiveness in the light of views held by more widespread Islamic sects. The 'biased' nature of these sources provides us a window into interreligious and intersectarian dynamics in Baltistan and Ladakh. Scrutinizing the way Nurbakhshis are portrayed in Persian and Urdu texts can thus provide us with a general handle on how to think of these sources in a critical fashion.

**Martijn van Beek (Aarhus)—*A state of decline? Ladakhi perspectives on the present state and future of Buddhism***

There is a certain irony in the fact that while the Buddhist majority in Leh district arguably has more political control and influence over the state and future of the region than at any other time since the Dogra conquest, there is a widespread and profound sense that the future of the Buddhist community and of the dharma is under threat. This paper offers a discussion of such opinions, the diagnosis of the contemporary world and local society that they are based on, and presents a number of the different ways in which institutions and individuals are seeking to address the challenges that modern society and politics pose, or are believed to pose, to the future of Buddhism in Ladakh.

**Chiara Bellini (Bologna)—*The mGon-khang paintings in dPe-thub***

My paper deals with the wall paintings preserved in the mGon-khang at the dPe-thub monastery, Ladakh. Paintings in the temple date probably back to the early 15<sup>th</sup> century, when the complex was presumably built. These images have not yet been documented.

The temple houses eleven statues of protectors, including the figure of Vajrabhairava, the major one. The wall behind the statues is not decorated except for the halos of flames. The other three walls are covered with paintings of considerable interest, in terms of both composition and style. The surface is divided into sections containing representations of various kinds: multiple-armed yab-yum deities, Herukas, Dakinis with flexuous bodies and wrathful faces, female deities, Dharmapala riding their mounts, Mahasiddhas and figures of knights.

Each figure has been drawn with great accuracy both in the execution and in traits and details like hairstyle, jewels, dresses, and gestures of the hands. The style is of considerable quality, and these paintings may offer useful evidence for tracing the evolution of the artistic style in Ladakh. We find elements related to Kashmiri tradition together with local features and elements derived from contact with Tibetan paintings.

**Alessandro Boesi (Milan)—*The Goddess of Phokar and the Festival of Flowers***

According to Ladakhi tradition, certain areas located in Kargil district such as the valley of Phokar and Serzhing villages, Urgyen Dzong and Sapi are particularly important as far as the great Indian tantric yogin Guru Rinpoche is concerned. As happens in many other Tibetan cultural regions, his passage is marked by the presence of his supposed meditation caves, rock hand-prints, and the so-called *rang 'byung*. Local tales describe the travel of the master from Oddiyana in that region recalling his submission of the traditional pre-Buddhist divinities to the new introduced faith, among whom stands out the goddess known as Phokar Jomo, the protective deity of the area. Her main dwelling is located at Jomo Shugpa, near Phokar village in the middle of a thick juniper forest, one of the few remaining wild wooded areas in the whole of Ladakh.

This paper discusses the legends, rituals and ceremonies related to the celebrations in honour of the Phokar Goddess, which take place in summer as soon as crops have ripened. The data derive from textual studies, information obtained from Ladakhi informants and on-site observations. Firstly a description of the area will be given: its

environmental and human settings, its sacred buildings, its activities related to the goddess. Secondly the different events of the celebrations will be examined with particular reference to the following points: the ritual of the flower offerings and the manifestation of the goddess through a local shaman.

**John Bray (Tokyo)—*The Ladakhi lo-phyag mission from Leh to Lhasa in regional perspective***

The triennial *lo phyag* ('Lopchak') mission from Leh to Lhasa was instituted as a result of the 1684 Treaty of Tingmogang between Ladakh and Tibet. The mission benefited from obligatory transport labour on both sides of the border between Ladakh and Tibet, and continued until the late 1940s.

This paper reviews the history of the *lo phyag* from a regional perspective. What features of the mission are distinctive, and what does it share with other similar 'tribute' missions in the Himalayan and Central Asian regions? The paper draws attention to the *lo phyag*'s ritual aspects as well as its political and commercial significance. It discusses the role of the Muslim traders who often managed the practical aspects of the mission. And it compares British policy debates towards the *lo phyag* with similar policy discussions in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries concerning missions from Hunza and Nepal to China.

**Francesca Cardì—*The methods of gathering the best medicinal plants***

Ladakhi medical knowledge, though presenting its own peculiarities, belongs to Tibetan medicine, whose treatises constitute the main reference for medical education and practice in Ladakh.

As in the regions of Tibet proper, in Ladakh medicaments may be prepared by combining several ingredients of different origin, of which the most important are plants, gathered locally or imported from lowland India. Notwithstanding the severe climate and aridity of the region, many different medicinal plants thrive in a few areas of Ladakh and local traditional doctors used to devote some time every year to find the best of them.

Fieldwork conducted by the author along with local practitioners in some plant collection areas of Ladakh, such as Rangdum, Sapi, and Khardong-La, has shown that herb collection is conducted on the basis of a procedure, consisting of seven points, which direct the gathering, particularly as far as time, season, environmental settings, plant features and way of collecting are concerned, in order to find the specimens having the best therapeutic properties. The ability to put into practice the above indications can be acquired only after several years of study and practice with the guidance of an experienced master.

**Valentina Cataldo (Bologna)—*Music in Tibetan Buddhist rituals in Ladakh***

The aim of the paper is to investigate Tibetan Buddhist music in sacred rituals, analysing the monks' singing styles and the instruments used in the liturgy.

The paper analyses the similarities and differences between the musical practices described in written texts and actual practice in Ladakh. It shows that music still plays a fundamental devotional and symbolic role in religious ritual. Music never merely

accompanies the ritual: rather it fulfils an intrinsic role, serving as a means to reach direct contact with the transcendental.

One way to discern the role of music is to analyse the recitation of *mantras*. The paper describes the two ways of performing and enunciating ritual texts: '*don*' and '*rta*'. '*don*' is a plain recitation, often very quick, which uses rhythmical schemes and repeated pitches and which changes according to the lyrics. '*rta*' is a syllabic and measured chant. It really sounds like a psalmody, chanted with plain melodic patterns. It is like a strophic melody, made up of scales changing from monastery to monastery, often repeated in a progressive way from strophe to strophe.

With the help of audio, video and photographic recordings, it will be possible to analyse the melodic and rhythmical structures, and the use of instruments (considering their organological features, their returning structures and the interaction of the different elements between them) in a selection of different rituals.

The comparison between field experience and written texts points to the changing functions and symbolic value of certain instruments. The paper will discuss these changes with particular reference to the *gendi*.

**Col R. T. Chacko (Bangalore)—*Black-necked cranes (Grus nigricollis) breeding in Ladakh and the problems they face***

In India, the Black-necked Cranes (*Grus nigricollis*) breed only in Ladakh. Though first sighted in 1920, their present population is very small, and the breeding success rate has been poor.

My eight-year study, which started in 1991, clearly brought out some new breeding areas and the problems they face during breeding. These include: inconsiderate tourists visiting the nests, disturbing them and handling the eggs and chicks; destruction of eggs and chicks by now semi-feral dogs introduced into those areas; and destruction of eggs and chicks by humans. In 1995, out of the 21 eggs laid in 12 nests, 9 hatched but only 2 chicks finally migrated with the parents. The rest were destroyed at the egg or chick stages, mostly by dogs and humans.

Urgent action is needed if we are to protect them from disappearing from Ladakh, just as we lost the Siberian Cranes from Bharatpur in Rajasthan, India.

**Anuradha Chaturvedi (New Delhi)—*Representation of the significance of cultural resources in 19th century Ladakh and Zaskar through a study of two pictorial, cognitive route 'Wise' maps in the British Library collection.***

Some of the diverse traditional methods and sources of information related to the identification, depiction and representation of significance of cultural resources of and by the Ladakhi community include:

- the traditional genre of guides for pilgrims and lay-persons known as 'Neyik';
- 'Namthar' or local histories of various sacred sites & buildings, primarily monasteries, which reflect, to some extent, community understanding of links with the land & folk knowledge;

- inscriptions in buildings related to the construction and repair of important structures.

Two unique cognitive pictorial route maps of Ladakh & Zaskar, from an album of six large pictorial maps & twenty five drawings in the Oriental & India Office Collection of the British Library have been analysed by the author. The maps and drawings in this album are ascribed to the period between 1844-62 CE by Michael Aris in the catalogue notes. This paper is an attempt to reinterpret the various themes depicted in these (hybrid) traditional maps from the disciplinary perspective of a conservation architect, and to integrate the various heritage components identified into an informed process of formulation of a cultural resource-centred sustainable development model.

#### *Types of Representation and Significance*

Termed as the ‘Wise Maps’, these maps are believed to have been painted in the tradition & using the conventions of the ‘Neyik’ genre by a monk of Zanskari origin who had contact with Europeans.

Constituting early examples of a hybrid map and topographical illustration from within the community, these pictorial maps depict existing cultural landscapes, serving the dual purpose of a guide for travellers along the routes depicted as well as identification of the significance of various components. They were perhaps specially commissioned by European exploratory and scientific expeditions to identify the significant features along the main trade routes. If so, they could constitute one of the earliest examples of participatory resource mapping known.

Although in terms of technique, and conventions of representation of both the ‘physical and metaphysical world’ from multiple perspectives, they are in stark contrast with European geographical and topographical maps, it is to be noted that they were prepared during the same period that scientific mapping expeditions by British surveyors were gradually covering the hitherto uncharted territory in the northernmost part of India (contiguous with Central Asia) with a cartographic grid. None of the later military, administrative and revenue settlement maps, gazetteer and other scholarly maps and plans of this area acknowledge or demonstrate any cultural continuity with maps of this type which had attempted to combine observed, factual reality with the community values underlying this material reality.

#### *Cognitive Maps as a Cultural Resource*

As mentioned by G. Malcolm Lewis, maps such as these can be sources of evidence for diverse disciplines which not only indicate the location of settlements, trading sites and networks, but also suggest how indigenous communities have ‘cognitively structured their worlds’<sup>1</sup>. Pictorial maps such as these two ‘Wise Maps’ in themselves constitute a cultural resource of the community and communicate a ‘traditional world-view’ which has been largely replaced by western formats of resource identification and mapping.

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<sup>1</sup> Interview of G. Malcolm Lewis - <http://www.geography.wisc.edu/histcart/index.html>

This cognitive map, in a pictorial manner, depicts the differences in the characteristics of some of the sub-regions within Ladakh, through the eyes of a member of the local community in the 19<sup>th</sup> century. It helps in a more profound understanding of the diversity within the region, and also in the identification of the underlying factors which were used in the traditional demarcation of the Ladakh region into various sub-regions by the community.

**Juliane Dame (Heidelberg)—*Food security in Ladakh: subsistence-oriented resource utilisation and socio-economic transformation***

Within the framework of rapidly changing political and socio-economic structures, rural food and livelihood security are facing new challenges. Besides shifting conditions on the village level, regional, national, and international processes have an increasing impact on actions and strategies of local actors. Due to a generally peripheral location, limited resource potential, and political marginalisation, high mountain areas are especially exposed to these dynamics.

The ongoing research project investigates the effects of changing structural conditions on food security in Leh district, Ladakh. Therefore, a food system-approach is presented including three components: food availability, food access and food utilisation. Each component consists of various interdependent elements (such as institutions, trade, production, income-generation patterns, social values, and nutritional knowledge).

The paper presents first results of own fieldwork in 2006 and 2007. Besides qualitative research methods, the empirical approach uses quantitative methods, GIS and remote sensing techniques. During the primary project phase, the complex shape of the underlying food system in the study area is of central interest. Apart from subsistence-oriented resource utilisation, non-agrarian income sources (e.g. in the tourism sector), trade of food and foodstuffs, as well as governmental and non-governmental programmes gain importance.

The study proves the necessity of integrated and multi-methodological approaches and constitutes the basis for further research. A deep understanding of underlying processes and their spatial, temporal and functional interdependencies is necessary for questions of adaptation to further changes (e.g. globalization and climate change).

**Pascale Dollfus (Paris)—*Who are “Those of the Black Castle”? Discussing the past of a nomadic group inhabiting the south-eastern edge of Ladakh***

It is commonly asserted that nomadic pastoralists in Ladakh trace their origins back to Tibetan nomadic tribes. This hypothesis postulates that present day herders belong to the same stock population and assumes that they have always been nomads.

In this paper, taking into account the case of Kharnak people, "Those of the Black Castle", I question this view. I show that they do not have the same legendary and historical traditions as the other two nomadic pastoralist groups: namely Korzok and Rupshu. On the other hand, they share the same lineage (*brgyud*) or "bone" (*rus*) with the agro-pastoralists inhabiting the valleys nearby and therefore they share the same clan deities. In other respects, building corrals, houses and store-rooms does not appear to be a recent phenomenon but, according to local tradition, started with the very beginning of the community, before the founding of their key monastery in the

beginning of the 19<sup>th</sup> century. I was told that in previous times, their forefathers had more fields and used to produce higher yields.

All of this suggests that "Those of the Black Castle" may descend from shepherds belonging to neighbouring places and adopted the nomadic way of life barely several centuries ago. In other words, nomadism began as an extension of agricultural settlement, as the herds and flocks kept by settled populations grazed farther and farther away.

**Dorje Dawa & Davide Geneletti (Trente)—*Developing an environmental GIS database for a remote mountainous area. A regional-scale study in Ladakh, Indian Himalaya***

Geographical Information System (GIS) databases contain a set of data which are prepared, analyzed, processed and assessed by the integration of GIS functionalities, remote sensing, and global position system (GPS). In particular, fundamental GIS data layers comprise land cover, Digital Elevation Model (DEM) and derived aspects, geology, climate data. GIS plays a prime role in most planning and management activities. However, in many developing countries, GIS databases at the local and regional level are unavailable, or unreleased due to several reasons, which include lack of expertise and resources, isolation, strategic and national security reasons. In Ladakh, a comprehensive GIS database is lacking, essentially due to a combination of these reasons, including the region's strategic location for India. In addition, complex mountain topography hampers information retrieval from satellite images, as well as basic GIS processing, land cover classification and DEM.

This study is aimed at developing a GIS database for Ladakh targeted at environmental aspects, and aimed at supporting environmental planning and natural resource management. The database processing included:

1. Land cover classification using Landsat ETM (Enhanced Thematic Mapper) images. The classification was validated by using ancillary data and extensive field surveys.
2. DEM (Digital elevation model) construction by processing SRTM (shuttle radar topography machine) data through geo-statistic analysis.
3. Interpolation of climate data and construction of vegetation indices (NDVI).
4. Soil and geologic mapping by improving existing data layers through DEM analysis.

This database, coupled with GIS spatial functionality and modeling techniques, provides an efficient tool for environmental management and planning. As a test application, the GIS database was used to study the effect of human-induced impacts on the environment. As a matter of fact, Ladakh is experiencing a considerable increase in human-related activities, which comes at a high environmental cost for fragile environmental components (e.g., overgrazing, soil erosion, loss in soil fertility etc.) The application showed that the GIS database becomes significant and functional in identifying critical areas of intervention.

**Kaneez Fatima (Kargil/New Delhi)—*Women and Agriculture in Ladakh***

More than 80% of the Ladakhi workforce is engaged in agriculture. However, the role of women in the agricultural sector is often under-estimated or even ignored. This study examines the extent of rural women's participation in agriculture, animal husbandry and related activities with particular reference to Kargil District.

**Kim Gutschow (Williamstown, Ma.) Dr. Padma Drolma (Leh)—*Birth in Ladakh and Zangskar: from home to hospital***

Together, India, Pakistan and Bangladesh account for 28% of the world's births and 46% of its maternal deaths, while India alone accounts for greatest number of births and neonatal deaths in the world. Of the 27 million babies born in India each year, roughly 2 million will die in the first month. These births or their associated pregnancies kill 130,000 Indian women each year. This translates into one maternal death every five minutes.

How do we understand birthing in Ladakh and Zangskar in light of these statistics? This paper offers an overview of reproductive health in Zangskar and Ladakh, across two axes, the spatial and the temporal. It analyzes the social and individual factors that shape birthing experiences in Zangskar and Ladakh. It will focus on two major themes surrounding birth in the region:

- Which factors have helped produce and which have mitigated the shift from home births to hospital-based births in Zangskar and Ladakh during the last decade?
- What are the primary consequences of the shift from home to hospital birth in terms of maternal and reproductive health?

The paper seeks to answer how and why the home remains the most popular locus for birth in Zangskar as late as 2006, while Leh hospital is becoming an ever more popular locus for birth in Leh and its environs. Yet, the transition to birth in the hospital is relatively recent, in both Zangskar and Ladakh. The Sonam Norbu Hospital first saw more than 200 deliveries per annum in the early 1980s, yet by 2006-07, there were 1,119 deliveries per year. By contrast, Padum's Primary Health Clinic delivered its first babies in 2004, with less than 60 deliveries per annum by October 2006. How do women in Zangskar and Ladakh frame their choice to deliver in a hospital and what are the consequences of those choices? We consider how beliefs about birth pollution and reproductive health condition the choice to deliver in a hospital somewhat differently in Ladakh and Zangskar. We will close with some observations about the most pressing individual and social factors influencing birth statistics and experiences in Ladakh today.

The paper draws from extensive interviews spanning over a decade with mothers, doctors, midwives, and nurses in both Ladakh and Zangskar. One author has conducted fieldwork on birthing in the Leh hospital and rural Zangskar between 1995 and 1999, and 2006-07, while the other author serves as the head obstetrician at Leh's Sonam Norbu Hospital.

**Georgios T. Halkias (Oxford)—*Modern Pasts: Tracing the 1679 Tibet-Bashahr Treaty***

The 17th century was a critical period for the political history of India, Central Asia, Tibet and China. A deeper understanding of this milieu and its relevance for present-day political affairs can only come about from the collective effort of different specialists. For this presentation, I will focus on the north-western Himalayan range, which formed natural barriers and vital points of commercial and diplomatic contact between Mughal India, Central Asia, China and Tibet. As noted by contemporary scholarship, these border-zones were not impregnable to political forces forming on either side of the Himalayan range, for over time they transformed into areas contested, enriched and shaped by multiple centres of political and religious authority. It appears that old and emerging power-centres in the region were tempered and exasperated by one factor shared between them: the promotion and continuous flow of cultural expertise and commodities.

The foregoing discussion will trace the historicity of the Tibet-Bashahr Treaty, as it is currently available in three Tibetan witnesses and one official English translation, and discuss its status as a document that stands, inter alia, as an official act of remembrance of a 17<sup>th</sup> century confrontation between Empires (Tibet, Mughal), kingdoms (Baltistan, Ladakh) and principalities (Bashahr, Kulu) culminating in the Tibet-Ladakh-Mughal War (1679-1684). During the presentation, the following issues will be addressed: the alleged and actual date of the Treaty; its relation to the Ladakh-Mughal (1683) and Ladakh-Tibet (1684) Treaties; its privileged recollection of the war; its circulation in the archives of the British Raj; and its status for demarcating boundaries in contemporary Sino-Indian border disputes.

**John Harrison (Wales)—*Conservation of architectural heritage in Ladakh***

The paper considers the concept of “architectural heritage”, its origins in the West, its expanding definitions from individual monuments to entire towns and landscapes, and its geographical spread under international bodies such as UNESCO to all parts of the globe. India has adopted some of these definitions, but Ladakh is still at an early stage of awareness. What is the Ladakhi “heritage”? Who defines it? Should it be preserved, for what reasons, and if so, how? In a changing society, what are the forces acting to destroy or preserve the architectural heritage?

The paper looks at the role of statutory bodies in Ladakh and their effectiveness, and reviews the increasing amount of conservation work being undertaken by non-government organisations (NGOs), both foreign and indigenous. Concerns have been expressed about the lack of co-ordination and transparency, but what would be a suitable forum for the exchange of ideas and expertise? Can any progress be made without greater public awareness and support?

**Wolfgang Heusgen (Graz)—*New knowledge about the construction of the Wanla temple***

Over the centuries several attempts were made to seal the Wanla temple roof against water by adding additional layers of loam to the surface. This led to massive overloading of the structure, as clearly demonstrated by the wide cracks in the masonry.

In the course of recent repair work conducted under the auspices of the Achi Association, conservation workers reduced the thickness of the roof at the front (on the entrance side next to the lantern) by 43 cm and, at the same time installed a drain on two sides.

The conservation work performed in 2005 and 2006 led to the removal of more than 11 tons of loam from an area of approximately 21 square metres! The new roof, which is approximately 10-18 cm thick, was installed in two layers using an improved traditional technique (components: *marka-lak*, loam, soil, fluvial sand, horse dung and straw). In the critical zone where the roof joins the top ceiling (the parapet zone), we installed a strip of plastic reinforced with fibre glass to protect the painted areas by preventing the formation of ‘rivulets’ inside the building.

The most important finding in last year’s work was the discovery of a ‘double roof construction’. This raises new questions about the history of the building and the reason for such an unusual construction.

**Neil and Kath Howard (Birmingham)—*Historical relics in the rGya valley, eastern Ladakh***

The district of rGya in eastern Ladakh contains one of the intriguing mysteries of the early history of the Kingdom. There are indications that the district, or at least its ruling family, were once much more important than during later times when the history of Ladakh is better documented. It is mentioned - and may therefore have been important then - at the time of the founding of the kingdom; there is a rich array of archeological remains from the time of the Second Diffusion of Buddhism there; and it is strategically situated on both the great trade route to India and one of the branches of the route from Kashmir to central Tibet. Yet we know next to nothing about it

The authors have been fortunate to have been given a large number of photographs of the antiquities at rGya and Meru. From an analysis of these they hope to demonstrate the importance of the district approximately one thousand years ago and to set the surviving ruins in a proper historical context. In the light of this exercise a re-examination of the surviving fragmentary references to rGya in the sources may enable at least the major questions for further research to be defined.

**Blaise Humbert-Droz—*Can Ladakh’s biodiversity withstand the impact of tourism?***

The rapid development of tourism in Ladakh is contributing in a major way to economic prosperity, especially in the Leh region and along the main transportation corridors. At the same time, the scale of touristic operations, their relative suddenness and their uncontrolled nature are proving a major strain on Ladakh’s natural resources - its water, wetlands, grasslands - and the unique diversity of plants and animals they support. The situation is getting worse with every passing tourist season and puts the long-term survival of Ladakh’s biodiversity and the sustainability of tourism itself into jeopardy.

This paper takes as a case study the Rupshu region of Eastern Ladakh. Until recently off-limits to outsiders, the area has suffered serious environmental damage after being suddenly and without any preparation thrown open to mass tourism in the early 1990s. The sorry environmental state of Tso Moriri – the lake is an internationally-

recognized wetland reserve and a hot spot of biological diversity – and of other gems of nature like the Markha Valley (Hemis National Park), appears to have triggered a belated but nonetheless salutary reaction from unexpected quarters, including the Ladakh Tour Operators' Association and the Department of Tourism. Following on earlier initiatives to stop devastating off-road car rallies and clean up popular destinations in wilderness areas, a consensus has gradually emerged to attack the problem at the root in an attempt to restore these unique environments to their earlier condition.

A series of proposals have now been submitted to the Ladakh authorities. The task of implementing them will demand the full support of the authorities, the local people, the tourism industry, the visitors themselves, NGOs... If this happens, then the rich biological diversity of Ladakh could indeed withstand the current onslaught of tourism. Instead of turning gradually into the second highest garbage dumping ground after Everest, Ladakh still has the potential to become a model showing that judicious development can go hand in hand with the preservation of biological wealth and vibrant traditions.

**Christian Jahoda (Vienna)—*Spiti and Ladakh in the 17<sup>th</sup>-19<sup>th</sup> centuries: views from the periphery***

Spiti and Ladakh have been related through many cultural, political, religious and other ties since at least the time of the foundation of the West Tibetan kingdom in the late 10<sup>th</sup> century. Between 1630 and 1846, with the exception of some years at the end of the 17<sup>th</sup> century, Spiti was part of the kingdom of Ladakh.

This paper studies the relationship between Spiti and Ladakh during this period focussing not only on political and administrative but also on socio-economic and religious aspects which have so far received little attention (e.g. socio-economic organisation of villages, cult of rDo rje chen mo). My presentation is based on extensive field research in Spiti since 1997 as well as some new evidence from documents and oral tradition gathered by A.H. Francke, Joseph Gergan and others kept in various archives in Europe.

**Kacho Mumtaz Ali Khan (Kargil)—*History of Chiktan Razi Khar (castle) and its preservation and reconstruction***

The nine-storey Chiktan castle was built by King Tsering Malik, one of the great kings of Chiktan, in the 16th century AD. With security in mind, it was built on a bull-shaped cliff: the mason and the architect was the famous Shinkan Chandan of Chhorbat. The castle's layout, wood carvings and layout serve as a testimony to the rich architectural and structural skills of that era.

Unfortunately, the castle is now in a state of disrepair, and the region's cultural heritage—including its folksongs, and folktales such as the Kesar saga—is in decline. The preservation and reconstruction of Chiktan castle would an important step towards the revival of the local cultural heritage.

**Deborah Klimburg-Salter (Vienna)— "*The Life of the Buddha at Alchi, in regional perspective*"**

The subject of this communication is a previously unidentified 'iconographic unit' found in Indo-Tibetan and Western Tibetan wall paintings of the Life of the Buddha. This iconographic unit consists of four preaching scenes. The earliest occurrence of this iconographic unit in Ladakh is in the painting decorating Maitreya's dhoti in Sum burtseg, Alchi (attributed to the early 13<sup>th</sup> century).

This iconographic unit is unknown in India or Tibet prior to the representation in the Tabo Main Temple ca. mid 11<sup>th</sup> century, where they apparently occurred for the first time. It will be demonstrated that the particular form and function of the iconographic unit (The Four Preaching Scenes) and their function can be related to the visual vocabulary formulated in the mid-11<sup>th</sup> century at Tabo in order to communicate the distinctive character of the royal *bla ma (lha bla ma)*. This iconographic unit at Tabo was an attempt to adapt the visual spiritual biography to the Indo-Tibetan milieu, a phenomenon also to be identified in contemporary Tibetan literature. It will be seen that while the Alchi paintings derive from the Tabo visual tradition, they also use a distinctive visual rhetoric appropriate to the different patronage and historical context in which they were created.

**Gerald Kozicz (Graz)—*A 12<sup>th</sup> century stupa in the neighbourhood of the monastic complex of Nyarma***

The enormous monastic compound of Nyarma, the foundation of which is related to the activity of Rinchen Zangpo (958-1055; the great translator of religious texts during the Second Diffusion of Buddhism in West Tibet), is situated in the Indus valley approximately two kilometres south of Tiksey. The splendour of its early days seems to have faded away long ago, and the site is in complete ruins today. When David Snellgrove visited it some decades ago, he noted that "the temples of Nyarma are just empty shells" (Snellgrove and Skorupski, 1977). In 1981, Jamba Losang Panglung presented a description of murals which were still intact inside a stupa in the western area of the former compound (Panglung, 1983). He dated the murals to the 15<sup>th</sup> century, more than 400 years after the foundation of the Nyarma complex, which took place around the year 1000.

During the last five years the author carried out several surveys of the compound and the surrounding area including the chapel on the eastern hill and large number of ruins and stupas in the area to the north of the compound. The whole area documented in this survey is approximately 2km long and 400m wide. While inside the compound no pieces of art and architecture dating to the early phase have remained intact, there are a small number of stupas outside the monastic boundaries, where murals have survived.

The paper is aiming at explaining the architecture of one of those stupas, which is situated at the northern end of the area under discussion. It has a number of remarkable features. Most noteworthy is the fact, that it has a completely decorated ground floor (the murals are partly damaged today) and a decorated upper chamber as well. This kind of upper story that is merely an L-shaped cat-walk can be accessed through a small door-like opening from outside. The style of the paintings is similar to the paintings of the temples of Mangyu, while the order of distribution is completely different to the spatial system and order which had been used for the stupas of the

Alchi Group of Monuments. Evidence for the close relation to the murals of Mangyu is provided (a) by the style of the Buddhas and (b) by the way the purley decorative elements such as geese and curtains were drawn. The murals inside include – amongst depictions of Buddhas and Boddhisattvas – remarkable depictions of the traditional eight Tibetan types of the stupa.

Referring to the architectural concept it must be noted that the Nyarma stupa has a significantly non-symmetric lay-out. In this respect it contradicts to the conceptualisation of the stupas of the Alchi Group. In addition, it once had a hidden chamber in a very prominent position behind the main wall, i.e. opposite the entrance, which was unfortunately un-sealed in the past. This is another unique aspect of the building.

This Nyarma stupa is a unique piece of architecture and art. The paper will focus on the analysis of the structural and geometric particularities as well as a documentation of the iconographic program through architectural plans and drawings of the interior elevations of the chambers. The presentation will include a comparative study including the stupas of the Alchi Group.

The author will like to draw the public and scholarly attention towards a unique piece of the early Buddhist art of Ladakh, which has escaped from documentation so far. A short documentation of the ruins of the large area documented will also be included in the paper in order to provide a basis for the understanding of the topographical setting and the relation of the stupa to the other monuments in the area.

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#### **Richard V. Lee (Buffalo)—*Emerging infectious diseases and the integrity of indigenous cultures and regions***

Indigenous people living in geographically remote places have been a favourite 'target' for anthropologists, epidemiologists, and explorers. The physical and spiritual environment and the biologic characteristics of isolated populations are of interest to scholars pursuing the origin and the limits of human activities.

Infectious disease has been a particularly popular subject of field research and speculation. The examples of epidemic catastrophes among island peoples and following the European entrance into the Americas have established a pessimistic and hostile attitude to the intrusion of urban, cosmopolitan visitors among remote villagers. However, remote does not automatically mean isolation! This is especially true for Ladakh. The history of travel and trade through Ladakh destroys the notion that the region is the equivalent of a remote island. The migratory pattern of birds adds to the transport of animal and human pathogens through the region. Ladakh has protected and maintained its traditional culture for more than a millennium despite the waxing and waning of plagues and invaders. Its stability is perhaps because it is

remote enough to be left alone most of the time but accessible enough for infectious pathogens to circulate and maintain immunocompetence throughout the population.

**Erberto Lo Bue (Bologna)—*Notes on Buddhist funerary practices in Indian Tibet at the dawn of the 21st century.***

Twenty years after the publication of Martin Brauen's unsurpassed study on death customs in Ladakh (1982), it seemed useful to the author of this paper to find out if funerary practices had undergone any changes in the course of their history in Indian Tibet and to compare some of his own findings with data collected in central Tibet. For that purpose he carried out field work in Ladakh (2002 and 2003) as well as Lahul, Spiti and Kunuvar (2003) under the sponsorship of the University of Bologna, as part of an interdisciplinary research project involving also the universities of Turin, Milan and Venice: "Places of the Living. Places of the Dead". In addition, he was able to collect data on sky burial in central Tibet (2004).

This paper touches upon two aspects of death customs as investigated by its author in those years: the so-called "sky burial"; and the use of *Bar do thos grol* texts. Towards the mid-20th century the practice of feeding carrion-eating birds with dismembered human bodies seems to have vanished from Indian Tibet, where cremation has been the regular way of disposing of corpses among Buddhists independently of the availability of wood supplies; in contrast, sky burial has enjoyed renewed popularity in central Tibet in recent years. Furthermore the use of *Bar do thos grol* literature in Indian Tibet does not appear to be an essential feature in Buddhist funerary customs, when comparing its importance to that of the practice of transference (*'pho ba*) especially in Ladakh

**Filippo Lunardo—*Tshogs zhing: a wall painting in the new 'Du khang of Spituk (dPe-thub)***

The *tshogs zhing* is the iconographic representation of the visualization of the assembly of *gurus* and deities as requested in the *bla ma mchod pa* liturgy, a preliminary practice (tib. *sngon 'gro*) for the accumulation of spiritual merits necessary to achieve the final goal of the union of emptiness and great bliss, as expected by the Vajrayāna praxis.

Codified for the first time by the first Panchen Lama, the *bla ma mchod pa* literature has gone through changes over the centuries, and the linked iconography reveals the same transformations so that, from the 18<sup>th</sup> century to the present day, we can analyse at least three typologies of images, always shown on *thang kas*, with the exception of a few Mongolian examples.

The Spituk wall painting *tshogs zhing* could represent an example of the first depictions of the topic realized and shown on a wall, in a form other than the usual one seen on *thang kas*. In fact, the *tshogs zhing* iconography on *thang kas* shows a wish-granting tree on which, and above which, the root *guru*, the *gurus* of the lineage and the deities stand, whereas in the Spituk wall painting the tree disappears and all of the figures lie down on three horizontal registers, with the root *guru* at the centre, from whose heart the three levels and all of the figures originate, as prescribed by the liturgical literature.

**J. Seb Mankelow—*Seeds of change: contemporary agrarian trends in Central Zangskar.***

For many inhabitants of Central Zangskar, a combination of government subsidy, development initiatives, and a growing cash economy, has largely removed the ecological uncertainty and risk from subsistence farming. Moreover, the security provided by Government provisions has removed the burden of borrowing from monasteries or wealthy households. Free from the necessity of subsistence, and with greater financial independence, inhabitants of Central Zangskar are enjoying increased flexibility to modify agrarian practice and balance agricultural production with a rapidly changing socio-economic landscape.

Contrasting contemporary agricultural trends against more traditional practices, this paper explores agricultural change in Central Zangskar. Shifts in practice, such as those relating to fertiliser application, mechanisation, and cash crops, are discussed in the context of the social, economic and environmental factors that are motivating change. Whilst efforts are being made to maintain agricultural productivity, Zangskari farmers are employing the time and labour-saving benefits of mechanisation and modern fertiliser to overcome problems arising from the division of farm estates; the decline in available workforce, household cooperation and labour sharing agreements; and the time intensive demands of employment. The growth of Zangskar's capital economy, climate change, and water security, are also identified as influencing the farming calendar and the cultivation of new crop varieties.

**Petra Maurer (Heidelberg)—*Sa bdag and tortoise. A survey of the tradition of geomancy in Ladakh***

*Sa dpyad*, literally the examination of the earth, is the Tibetan term for geomancy. Main source for the understanding and interpretation of Tibetan geomancy is chapter 32 of the *Vaiśūrya dkar po* said to have been written by *sde srid* Sangs rgyas rgya mtsho (1653–1705), the regent of the fifth Dalai Lama. The whole text deals with different parts of astrology and astronomy, for instance *byung rtsis* and *nag rtsis*, which are of Chinese origin; calculations of the suitable time for a wedding (*bag rtsis*), or of times when the risk of disease is particularly high (*nad rtsis*) and so on.

In the first section of chapter 32, Sangs rgyas rgya mtsho describes in detail the shape of unsuitable areas. First he explains which areas ought to be avoided when choosing a place in which to build, then the rituals to be performed in case a building already stands in an unsuitable place. In the second section, he describes terrain suitable for the erection of a building and then the ritual to propitiate the *Sa bdag lto 'phye*, before any construction work is started. The tradition, especially the rituals before the construction of a building, was of great importance in Tibetan culture.

In order to survey the tradition and practice of *sa dpyad*, I carried out some research in India and Tibet and looked for astrologers familiar with the subject. In 2003 I met two astrologers in Ladakh who agreed to discuss some difficult parts of the text and to share their knowledge of the practice of *sa dpyad*. This paper presents some of the results of this research.

**Martin A. Mills (Aberdeen)—*Charting the Shugden interdiction in Ladakh***

The Dalai Lama's 1996 interdiction against the worship of the Tibetan protector deity Dorje Shugden cause ruptures and disputes throughout the Tibetan religious world,

and has often been presented as part of a wider conflict within Tibetan Buddhism, between the modernising forces of non-sectarianism and the conservative tendencies of Gelug exclusivism, as epitomised by Shugden worship.

This paper will provide an initial examination of the Dalai Lama's interdiction on the worship of Dorje Shugden in Ladakh between 1993-present, discussing in particular the dynamics of the changes initiated by the interdiction in Ladakh's various Gelugpa monasteries, in particular Lingshed, Rangdum, Spituk and Likir.

The paper will also seek to examine the interdiction as part of the wider context of the assertion of a particular model of ceremonial governance from Dharamsala, based on a particular organisation of governmental protector deities. Its principal argument is that, while a criticism of general religious sectarianism within Tibetan communities remained an important dimension of the Shugden interdiction, it was largely secondary to a ceremonial logic of governance.

**Mohammad Saleem Mir (Kargil)—*Sustainable agricultural production in Ladakh***

Crop production in Ladakh is restricted to a fraction of its vast geographical area, because crops are possible only under assured irrigation. Mixed farming is the common practice and animal husbandry forms an integral part of local farming systems. The poor soil of the area has been made cultivable by enriching it with both farm compost and well-processed night soil. The majority of the farms are small or marginal. The fragmentation and reduction of the sizes of holdings makes farming less profitable, but the lack of other avenues of employment means that it is imperative to seek ways and means to ensure that agriculture is a sustainable and profitable avenue of livelihood.

To keep pace with the changing situation, many technologies have been developed, tested and identified as usable. These include better crop varieties, manipulations to overcome restrictions imposed by weather conditions, post-harvest technology, farm-based value addition techniques, and the use of solar energy. The long winters mean that there are long periods when grazing is unavailable, and this leads to a requirement for bulk production and storage of fodder to sustain livestock from the late autumn to the late spring. The introduction of multi-cut fodder crops can give relief to the farmer. By blending indigenous wisdom with appropriate technology, farming can be made both profitable and sustainable.

**Arik Moran (Oxford )—“*Shifting alliances? British imperialism on the Ladakhi frontier*”**

In 1837 prince mC'og-sprul, the last independent ruler of Ladakh, arrived in the kingdom of Bashahr as a refugee. The prince's host, Raja Mahindra Singh, proceeded to lead his distressed ally to the British authorities, who provided him with a modest estate where he shortly afterwards died. While Ladakh and Bashahr had joint interests—such as hostility towards their common neighbour, Kullu—the two kingdoms were subject to starkly different overlords; Ladakh being ravaged by the Dogras under Sikh supremacy, and Bashahr submitting to the British. Indeed, the allied kingdoms' common enemy, Kullu, was itself under the protection of the Sikhs. The appearance of the Ladakhi prince on the scene thus marks the advent of Ladakh's incorporation into the ambit of the British Empire.

This paper will assess the effects of British imperialism on the relationships between Ladakh and its southern neighbours. This will be achieved by examining how local perceptions of sovereignty were manipulated by Kullu and Bashahr on the opposing banks of the Sutlej River, which marked the border between British and Sikh spheres of influence. After establishing the nature of British imperialism in the north-west Himalayas, we shall proceed to examine its effects on political relationships under its aegis as experienced in Ladakh's relations with the princely states. We shall see that while British imperialism affected regional polities through a number of channels, it had to adapt to existing customs in order to establish effective authority. While this adaptation resulted in such original enterprises as the Palampur Fair (1867- 1879), it failed to override similar institutions originating from political/commercial relationships, which persisted long into the 20<sup>th</sup> century.

**Gulzar Hussain Munshi (Kargil). *Mosques, imambaras and khanqas of Kargil: the confluence of Buddhist and Islamic art and cultural heritage***

The buildings of the Purig (Kargil) region associated with the Islamic traditions are a fine example of the centuries-old co-existence of Buddhism and Islam and their art and culture. This paper will discuss the architecture and functions of three main sets of buildings. First, mosques are the buildings where Muslims offer *wajib* (obligatory) and *sunnat* (optional) prayers five times a day, either individually or in groups. The second category is the *imambara*, the building used by the Shi'ite sect of Islam to mourn the martyrdom of Hazrat Imam Hussain (a.s), the grandson of the Prophet Mohammed (p.b.u.h) in Karbala in 400 AD. Thirdly, *khanqa* (a Persian word) literally means a resting place of a saint, a scholar or an enlightened God-fearing person. There are number of them in Ladakh, especially in the Kargil region, and in Baltistan. They were initially built as residences/schools for Muslim preachers and their disciples. Besides preaching, the scholars would teach the holy Quran to local people, particularly children. In other words the *khanqa* was the Islamic equivalent to a Buddhist Gonpa. On the death of the preacher concerned, the *khanqas* were turned into their mausoleums.

**Nawang Tsering Shaksपो (Leh)—*Ladakhi folkdance***

Ladakh has a rich heritage of folk songs and dances which have been passed on as an oral and practical tradition from one generation to another. These songs and dances are simple in thought, language and movement: they do not require rigorous training but nor, on the other hand, can their simplicity be taken for granted.

Each dance starts with homage to the Triple Gem—the Buddha, Dharma and Sangha—and has three parts. The first part starts slowly. The dance develops into the second stage with a second act of homage, and now the music and movement becomes faster. The third stage comes without further homage: the dance develops and changes with the change in the music.

This paper attempts to provide guidelines for future research. Folk-dances are described in a broad classification of 11 categories, and each category is discussed in relation to the specific occasion that it marks. The author hopes to show that an adequate analysis of Ladakhi dance demands a study both of the dance itself and of the occasion on which it is performed.

**Sunder Paul (Leh)—*The conservation of the Alchi chos-'khor***

Alchi Monastery in lower Ladakh consists of a group of five temples known as the Alchi *chos-'khor*, which date back at least to the early 13th century AD. The Archaeological Survey of India (ASI) has declared the site to be a monument of national importance, and it is a potential candidate for UNESCO recognition as a World Heritage Site.

However, the conservation of what are basically mud structures has become a major challenge because of the recent change in the climate pattern: increased precipitation in the last two decades has already caused some damage to wall paintings in the temples due to eroded and leaking roofs. The ASI initially realized the need to make these roofs watertight and re-laid them in the traditional way using an appropriate mixture of clay and marka-lak, and restoring a gentle slope to the structure to ensure proper drainage. The ASI has also taken up the conservation of the Sumtsek (*gSum-brtsegs*—three-storied temple) by re-aligning the tilted wooden framework of the entrance and resetting the exterior roof.

Another burning issue concerns the construction of a 57m-high dam 1.4km upstream. The National Hydroelectric Power Corporation (NHPC), the agency which is constructing the dam, has conducted a detailed study on the impact of blasting on the group of temples, and claims that the vibration effects of the blasting are well below permissible limits and are in accordance with international norms.

**Poul Pedersen (Aarhus)—*Traditionalism in Ladakh: Marco Pallis and Abdul Wahid Radhu***

This paper deals with the relationship between Marco Pallis, the Greek-British Buddhist mountaineer, and Abdul Wahid Radhu, the Ladakhi Muslim caravaner. They met each other in Kalimpong in 1947 and became close friends. They shared an interest in religion or spirituality, which transcended narrow denominational borders. Marco Pallis, a long time follower of the French religious philosopher René Guenon, had a strong influence on Abdul Wahid Radhu's understanding of himself as a Muslim.

**Phuntsog Dorjay (Hannover)—*Introduction of Buddhism and Buddhist art in Ladakh: a study through ancient rock art.***

This paper discusses the introduction of Buddhism and Buddhist art in Ladakh from the Indian side especially from Kashmir.

The earliest rock carvings are represented by animal and human figures including those in dancing positions in a group, horse riders, fighting scenes and symbols of sun, palm and swastika. Later rock carvings of animals began to be replaced by *mChod-rtens* related to Kushan or early Gupta art in Kashmir. The carvings reflect the strong influence of the Kashmiri sculptural tradition: the custom of carving colossal images from rock in Ladakh may well have been inspired by carved reliefs in the Swat valley and Afghanistan.

It is well known that the ancient murals at Alchi were drawn by artists from Kashmir. In the valley of Kashmir, traces of early specimens of paintings unfortunately are not available. But on the basis of the figures on the tiles of Harwan (near Srinagar) dated

circa to 5<sup>th</sup> century A.D., inferences can be drawn about the early art tradition of the valley.

Buddhist rock carvings have been found mostly following the old route of trade and pilgrimage along the Leh-Srinagar highway and along the Indus. The carvings themselves display a variety of Buddhist iconology and of the development of architectural forms and designs, especially connected with the *mChod-rtens*. Rock carvings were noticed at Dras, Byama Khumbu, Karse Khar and Mulbek in Kargil District and in the Indus valley of Sham and areas of Leh. These sculptures are carved in a deep rounded relief, and are very different from the far more common shallow carvings of the later period. The costumes of the deities and lay devotees depicted on the rock carvings are Indian in style.

Many figures of archaic *mChod-rten*, which belong to the early mediaeval period, have been found in Indus valley of the Sham area. These stupas show some similarities with the stupas associated with Rinchen Zangpo. Scripts with some rock carvings are another indicator of age and culture.

**Mohammad Raza (Kargil)—*The Pakistani shelling of Kargil 1997-1999***

The month of April 1997 saw an escalation of tensions along the Line of Control (LoC) between India and Pakistan, and Kargil became a flashpoint for the decades-long hostility in the region. Firing continued the following year, and in 1999 hostilities escalated into the ‘Kargil war’ in which at least 413 Indian soldiers were killed. This paper discusses the impact of the shelling on ordinary people in Kargil, Drass, Batalik and Kaksar.

**Elena De Rossi Filibeck (Rome)—*Reflections on the cultural meaning of the Ladakhi marriage songs: a case study on the Wamle bag ston gi glu.***

The Ladakhi folk songs have been the argument of several papers by different authors who agree in saying that this kind of songs belongs to the cultural Tibetan world. Nevertheless, the songs do also belong to the oral literature *genre* which is very spread in the human communities and which preserves people’s tradition and identity.

The aim of my paper is to analyse materials concerning thirty nine marriage songs from Wam le in La dvags stod from some interdisciplinary points of view. A.H. Francke gathered these songs after their discovery by Joseph Gergan who copied them in the Tibetan alphabet in 1916. In 1932 Giuseppe Tucci received a handwritten copy of the whole *corpus* of the Ladakhi songs, most of which were being published together with their English and German translations.

For unknown reasons the copy remained forgotten in a cupboard of the IsMEO Library in Palazzo Brancaccio and was found again when the Institute (now IsIAO) was moved to a new site. My research on the Wam le songs is part of a project for editing the whole material kept in the IsIAO Institute, in collaboration with John Bray.

**Syed Bahadur Ali Salik (Skardo)—*Balti folksongs with reference to Ladakh***

This paper discusses a selection of Balti folksongs that relate to Ladakh. Folksongs have played an important role in shaping the culture and lifestyle of both Baltistan and Ladakh by conveying the ways and traditions of one generation to the next, and are an important part of the shared heritage of the two regions.

**Abdul Ghani Sheikh (Leh)—*Traditions of Sufism in Ladakh***

Initially the majority of Muslims in Ladakh and Baltistan were followers of Syed Nurbaksh who was inspired by eminent Sufis such as Ibn Aruni, Rumi, Hafiz and others. In a verse, Nurbaksh said, “I have become totally free from denomination, religion and sect. I am a lover. In Ladakh the whirling dervishes practised *dhikar* in ecstasy along with their disciples until the recent past. Both Sufism and Buddhist mysticism involve submission and service to a *pir* or *guru*. Both believe in the toleration of other religions, universal love, meditation and the renunciation of the world. It is time to revive the legacy of mysticism and its values in Ladakh.

**Harjit Singh (New Delhi)—*Changing Ladakh: some observations on environment, society and population parameters of Leh district***

Ladakh has undergone major changes in recent times, especially since 1960, and these changes have important bearing on the traditional society as well as on the environment. The main objectives of the study are to understand the following: the nature of the environment and its impact on society; the traditional human response to the environment as reflected in the local economy and cultural set-up; the nature of recent changes particularly those which came about after 1960; trends and changes in population parameters as seen in the latest census data of 2001; implications of recent changes for environment, culture and population of Leh district.

**Patrick Sutherland (London)—*The Spiti Sound Archive project: recording the Hirrip***

The Hirrip are the lower caste professional musicians of Spiti. They play a major role in village events like marriages, where they perform a cycle of songs to mark the journey of the bride to her new home. Throughout the long nights of Spiti wedding celebrations, Hirrip provide the music for dancing.

It is hard to imagine Spiti weddings without this music, but the population of musicians is clearly declining. Weddings are now fixed not just in accordance with auspicious dates of the Tibetan calendar but also to fit into the diaries of musicians.

Their lower caste status and social difference is indicated by the position they occupy in rooms, by the forms of language they use and which is used to address them and by their behaviour towards higher castes. Expressing honour, respect and status are day to day concerns for Spiti’s Hirrip.

Hirrip music itself is a powerful social signifier. They perform a repertoire of musical fanfares to greet arriving monks, aristocrats and others. This music respectfully acknowledges and highlights the hierarchy of Spiti society and by extension marks out the lower status of the players themselves. To play Hirrip music is perhaps to publicly perform one’s diminished status.

The Spiti Sound Archive project is a community oriented project concerned with documenting and recording songs, music and other sounds of Spiti. Recordings will be deposited within Spiti, with performers, schools and local cultural organisations as well as within the British Library.

**Tashi Ldawa Thsangspa (Leh)—*Distribution of petroglyphs in the Ladakh region: a comprehensive documentation and conservation initiative***

The study of the petroglyphs of Ladakh that we have discovered in the last ten years, and their spatial distribution across the region, has a special significance. Although only a fraction has been reported, the present study draws on a comprehensive survey containing more than 40 sites with hundreds of constellations. It includes more than 200 km along the Indus and almost all the major tributaries and valleys. Some of these petroglyphs have been repeatedly documented, e.g. the Tangtse inscriptions have been reported since 1907 by half a dozen scholars. The most elaborate published report on the petroglyphs of Ladakh by Francfort et al. (1988) is wide-ranging but covers only a few sites, each with less than a dozen rock art samples.

This paper focuses on the petroglyphs that we consider to be of exotic origin or style, and which belong primarily to the pre-Buddhist period. Broadly, the exotic petroglyphs are concentrated in or near the trade routes which have existed since prehistoric times. It is no surprise that many of these petroglyphs show common characteristics with those found in neighbouring regions. However, there are still many examples which show no clear resemblance to any cited in the international literature to date, and hence require further research.

Art resembling the ‘mascoïd’, or Okunev Culture of South Siberia, of the third millennium BC has been reported from Chilas (Pakistan), Zaskar and Gya. However, the examples we have discovered in Nubra valley show the closest resemblances to the ones found in Siberia. Likewise, petroglyphs in the ‘Domkhar Sanctuary’, which are reported for the first time here, have no parallel in stylized animals in the entire Upper Indus Valley. There are also examples of Chinese inscriptions. The ‘Tangtse Chase’ from Changthang region, show such a close resemblance to a part of the Iron Age art composition at Renmudong in Tibet, that it looks as if was ‘cut and pasted.’ The hundreds of anthropomorphic figures of Sham region correspond to the rich tapestry of beliefs and myths of the pre-Buddhist period and reflect the extent of human traffic on this particular route. Likewise, the petroglyphs of the Kargil, Chilling and Kere valleys also demonstrate their own peculiar depictions and styles.

To date, apart from the publication of academic papers, there has been no single effort to save or conserve these petroglyphs, which are succumbing both to natural weathering and to human activities and vandalism. We are approaching the Councils of Kargil and Leh to formulate a policy for the conservation of all archeological monuments under the name ‘Ladakh Protected Monuments’ corresponding to the existing National and State-protected monuments. The creation of a ‘Heritage Rock Art Garden’, is already under way, and this will house rocks with petroglyphs that are under immediate threat.

The state of Madhya Pradesh claims the world’s ‘longest chain of rock art’ extending for 12 km. However, one of our ‘chains’ stretches for 60 km. If we can achieve recognition for our claim, it may give a helpful impetus to the study of petroglyphs, which remains a neglected field in Ladakh.

**Tashi Morup (Leh)—*The Changthang Wildlife Sanctuary Act and future concerns among nomads***

In 1987 under the J & K Wildlife Protection Act the Changthang area, measuring some 4,000 sq kilometres was declared a wildlife sanctuary. But for whatever reasons, the act was never implemented. Since 2006, following the visit of the supreme court constituted empowering committee to some areas of Changthang, the government has now been trying to implement the act. However, the people of Changthang strongly oppose the act for it would go against their rights to their ancestral land.

Changthang is mainly inhabited by nomadic pastoralists who rear sheep, pashmina goats, and yaks. It is from this area that the luxury fibre pashmina comes from, which is annually brings around Rs15 crore to Ladakh. There is also vast potential for developing tourism in this area.

This paper attempts to look into the issue of the implementation of the Wildlife Sanctuary (protection) Act in the Changthang region. The Wildlife Act would impinge on the rights of the people living in Changthang and would hamper their livelihood prospects. While the act could cause severe impediments in the economic prosperity of the nomadic community, yet the protection of wild life in Changthang is of paramount importance in view of issues such as depletion of natural resources endangering the unique eco-system housing the repository of the distinctive flora and fauna. While the act can be implemented in certain specific areas of Changthang, which are rich in wildlife it should not blanket the whole area.

The situation is still in flux and this presentation outlines the issue and raises concerns for the future of Changthang.

**Balwant Thakur (Jammu)—*Changing trends in the performing arts of Ladakh***  
Ladakh never had a tradition of the ‘presentation’ of performing arts as all the performing traditions were a part of the celebrations of Ladakh. In such celebrations it was very difficult to find out who was or was not an ‘artist’ since all used to take part in singing and dancing during important celebrations other than ritual performances. Purity was the prime factor in the performing traditions of Ladakh.

However, emerging trends in the performing arts traditions have been a matter of grave concern for scholars, art lovers and people interested in the well-being of Ladakh. In the name of Ladakhi music new albums are being sold like hot cakes. The video albums based on these music tracks feature jeans-clad Ladakhi boys and girls riding on motorbikes. Among youth Bollywood trends have taken over the traditional performing modes. Since the death of Tsehu Lhamo, ‘the nightingale of Ladakh’, the music scene in Leh has been dominated by Meena Rana, a Garhwali girl. She is now the most popular singing voice in Ladakh and her Ladakhi music albums are in great demand.

Contemporary Ladakhi music reflects the clear influence of Nepali, Himachali, Pahari and Filmi music. Traditional instruments such as the *Surna* are being taken over by electronic instruments such as the synthesizer and electronic guitar. In contemporary theatre the Jataka tales are no longer the themes. The Manepa theatre form, which travelled down from Tibet to Ladakh, has now vanished. Many new initiatives have been taken to preserve the heritage of Ladakh but unfortunately no effort is being

made to save the performing arts of Ladakh from the onslaught of new emerging trends. The younger generation should be made aware of the damage they are inflicting on their own heritage.

**Christopher C. Wahlfeld (Buffalo)—*Fieldwork: patterns of reproductive health at two hospitals in the Leh district of Ladakh***

Reproductive success is a strong indicator of positive environmental adaptation and is reflective of genetic, biologic and cultural processes. These processes become increasingly pronounced when exploring the reproductive health of high altitude populations. Hospital-based studies from the 1990's (see Wiley 2004) report lower birth weights and higher incidence of neonatal mortality among Ladakhi newborns, when compared with other native high altitude populations. These outcomes suggest that maternal health and intrauterine growth patterns are primary driving factors influencing reproductive health in the region.

The present research examines the patterns of antenatal and perinatal biomedical healthcare sought by native Ladakhi women and seeks to determine whether the frequency of antenatal care influences birth weight and birth outcome. Demographic and anthropometric data were obtained from self-identified native Ladakhi women (n=200) as they sought reproductive healthcare at either of the major biomedical hospitals in Ladakh's Leh District between late April and early November 2006. In addition, retrospective data, including reproductive histories and birth weights, were collected from the reproductive health charts of native Ladakhi women that delivered at either facility from October 2005 through October 2006 (n=952).

These data will be subjected to statistical analysis using JMP 6. Initial analysis reveals an overall increase in mean birth weight among hospital delivered Ladakhi newborns over the past decade. Analysis demonstrates no correlation between frequency of antenatal care and birth weight or birth outcome.

**Sonam Wangchok—*Inventory of cultural resources in Ladakh***

The somewhat austere environment of the Ladakh region has sustained over the centuries a vibrant and rich cultural heritage which is evident in almost all facets of Ladakhi life. Given the close linkages Ladakh has historically enjoyed with neighbouring regions, it is not surprising to see strong influences of Tibetan, Kashmiri and other regions in its art forms but what makes this unique is the manner in which it has been amalgamated into a distinct tradition. Defining these cultural resources would be a first step towards planning for their preservation and therefore the need arises to prepare an inventory of cultural resources of Ladakh.

In response, the Namgyal Institute for Research on Ladakhi Art and Culture (NIRLAC) initiated a programme to document the extant elements of the built and natural heritage which have an impact on the cultural life of village communities across the region. Prior to this, there have been architectural heritage listings in Ladakh. However, these approaches defined the criterion for listing based more on the architectural or art historic value of the heritage rather than the actual value that the heritage holds for the people.

The approach adopted for this programme was to seek to understand heritage in terms of what the community holds of cultural value and it has several positive impacts such

as it allowed for the involvement of a larger range of local experts, the capacity to dialogue with village headman, monasteries and elders provided access to valuable traditional wisdom on the village and finally creating a cadre of resource people in Ladakh with a good knowledge of their heritage who can work in future for the conservation of this heritage.

**Bettina Zeisler (Tübingen)—Ci songkhani dra (*onomatopoeia*): *giving a voice to the event***

Spoken Ladakhi is rich in embellishing expressions: onomatopoeia, collocations, and idiomatic phrases. In this presentation I would like to focus on onomatopoeia or words that imitate the sound of an event. As they enrich the emotional content of a sentence, just like spices enrich the flavour of food, Rebecca Norman has rightly called them 'masala words'. During the transcriptions of various versions of the Kesar epic as well as of other narrations we (that is, my informants and I) have collected some 60 odd expressions, most of which are used in the dialects of Lower Ladakh (Khalatse and Domkhar).

Many of these words show an extraordinary phonological structure in the dialects of Lower Ladakh, which indicates that they do not have any lexical value. Most of them are bound to specific events and thus specific verbs, but nevertheless, most of them not only imitate the sound of the event, but may also indicate a specific direction of movement, and moreover all of them function as intensifiers, signalling a sudden, fast, and/or complete realisation of the event. Some of these words, such as /pat/, /rop/, or /lip/ have become less verb-specific and are widely used among speakers also of other dialects to express their astonishment or indignation.