



KEYNOTE LECTURE

Indian Independence, 'New Kashmir' and Ladakhi Christianity in the Early 1950s

John Bray

The early 1950s marked a distinct phase in the evolution of Ladakh's small Christian community. The key figures included the Swiss missionary couple Pierre and Catherine Vittoz as well as Eliyah Tsetan Phuntsog, a Ladakhi of high social status who had served as Tehsildar (Revenue Officer) and Government Information Officer before joining the Moravian mission in 1951. Together, they struggled with new variations of an old problem: how to find a Ladakhi expression of the Christian faith that was true both to local cultural traditions and to the teachings of the wider church. A key question concerned language. Tsetan Phuntsog was skilled in Classical Tibetan and, together with Pierre Vittoz, he worked on a revised Tibetan translation of the New Testament. At the same time, he experimented with new ways of writing the Ladakhi colloquial language, including modifications of the Tibetan alphabet. This proposal led to protests against him while he was still serving as Information Officer. The protests came to the attention of Indian Prime Minister Jawarharlal Nehru and prompted a tense exchange of letters between him and Sheikh Abdullah, the leader of the Jammu & Kashmir state government. These developments took place against the background of social and political change as Ladakh came to terms with the repercussions of the independence and partition of India and Pakistan as well as Sheikh Abdullah's 'New Kashmir' project. The Christian community had its own distinct history and dynamics but the language and identity questions with which it struggled in the 1950s still have resonance for the wider Ladakhi community today. The paper is based on primary source material from the National Archives of India, the Vittoz family's papers and the Moravian Church Archives and Library in London.

CLIMATE CHANGE

Climate Rituals: Traditional Response for Climate Change Adaptations in Ladakh

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Locals, especially Buddhists who have been influenced by Bonism, believe that every element – land, water, wind, etc. – has a landlord/spirit, and they pray to them throughout all agricultural works and during constructions. The astrologers were always consulted to fix auspicious and appropriate days and times for every household activity. Some particular texts (Phyogs-bcu mun-sel and bkra-shis brtsegs-pa) were read to appease the landlords/local spirits. Buddhists believe in interdependent (rten-'brel) and compassion (snying-rje). Hence, many rituals and festivals are performed to appease spirits and deities and even many folk songs to praise animals used for agricultural activities. The locals believe that these rituals and festivals are declining rapidly today, which is making the local spirits unhappy and they are causing natural disasters. According to them, the decline in religious and traditional practices are cause of climate change and many other issues related to environment and society. If the planet is getting warmer, we, the humans are behind it. The local spirits are not happy. People started exploiting nature and they have no respect for the nature. Religion influences many aspects of lifestyle that affect the environment. The current study will investigate further how religious and traditional beliefs influence the conservation of ecosystem, and the harmony of different elements and environmentally relevant behaviours. Cultural heritage, natural heritage, and traditional knowledge all contribute to communities' resilience in the face of climate change's repercussions, such as extreme climate, natural disasters, and conflicts. Practices from intangible cultural heritage are incredibly powerful tools for assisting communities in adjusting to a changing environment. The approach adopted for this study is to understand traditional beliefs and rituals influenced by Bonism and Buddhism through textual analysis as well as interviews and interaction and with local people from different parts of Ladakh who might have useful traditional knowledge and response for climate change adaptations.

Passive Solar Ladakh Greenhouse: Addressing the Challenge of Hidden Hunger in Ladakh

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Trans-Himalayan Ladakh region is characterized by extreme temperature variations, low precipitation mostly in the form of snow, high wind velocity, sparse plant density, thin atmosphere with high UV-radiation and fragile ecosystem. The average altitude of human habitation in Ladakh is over 3000 meter asl and the temperature drop up to -30°C in winter. Long winters reduce the cropping season to barely four or five months in a year. Seasonal shortfall and low dietary diversity among the local populace manifests as micronutrient deficiencies, a phenomenon that has been described as 'hidden hunger'. Harsh climatic conditions are the basic environmental challenges while meeting the nutritional requirements for maintaining highest level of mental and physical fitness in such adverse conditions are the other critical challenges. Providing essential nutritional support to those staying in high altitude are best taken from resources available locally as timely supply of fresh vegetables from low land is not always possible due to logistics constraints. Therefore, meeting the requirement of fresh vegetables for the local populace, especially during winter months, is a formidable challenge. Viewing the necessity of growing vegetables in winter, a large number of traditional passive solar greenhouses have been established in Ladakh since the 1980s. However, these traditional greenhouses have many limitations. To address this critical concern of the Ladakhi people, Defence Institute of High Altitude Research (DIHAR) developed Ladakh Greenhouse, an improvised passive solar greenhouse. The technology was formally transferred to Agriculture Department of UT Ladakh. A project entitled 'Improving Food Security and Promoting Livelihood through Ladakh Greenhouse' was then initiated by UT Ladakh in March 2020 which aims at popularizing Ladakh Greenhouse. Farmers in Ladakh are now establishing these greenhouses on their fields with support of the UT Ladakh, as of Dec 2022 over 800 numbers have been completed. The greenhouse is benefitting farmers in many ways by improving food security, promoting livelihood, water and energy conservation, sustainable organic farming and women empowerment.

Sustainable Development the only future for Ladakh: Effects and possible strategies

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Historically Ladakh has been the central focus between India and China because of its current shared border with the two nations. In light of being in an isolated and even at times uninhabitable region geographically, Ladakh had no major hopes in making large economic inroads that would eventually percolate to its masses. Since 2019 however with Ladakh acquiring the administrative setup and status of a Union Territory, it has opened new opportunities and brought tectonic shifts for the region. This paper will highlight the various opportunities the people of Ladakh have had access to since 2019 and how sustainable development is the only future that will keep Ladakh, its people and the fragile ecological environment intact. I have already started a case study of it on the Tibetan settlement in Ladakh after securing the required permission from the Chief Representative Officer DhondupTashi. The case study will also expand to the Central University of Ladakh and non-Tibetan establishments. This paper also attempts to analyze the possibilities of reopening the trade and transit route from the subcontinent to Central Asia of Ladakh's high mountain region which was practiced erstwhile when Ladakh was not under the Union of India. It will also discuss why the locals have valid fear over big business establishments and conglomerates. Possible solutions like strategizing inclusive developments and empowerment of the locals are highly recommended from my case study for now. Besides that, the study also has shown the opportunities and challenges relevant to the recent Sixth schedule demands made by the people of Ladakh.

Climate Change and Resilience in Ladakh: A Photovoice Project

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Background: Scholarly work on the devastating effects of climate change on the landscape is abundant. We add to what is known by investigating the social effect on people's lived experiences and their resilience.
Methods: Photovoice puts data collection in the hands of participants to photograph their surroundings.

Photographs are reviewed with the participant and an interview done to elicit stories. We recruited 30 local residents from 26 different villages. Participants were asked to take photographs four categories: A self-portrait in a setting that reflects your identity; a landscape you love; a landscape damaged by climate change; and an adaptation to climate change. The research team collectively reviewed the photo-narratives for analysis. Photo-narratives were displayed at a public exhibition with the photographers there to speak with visitors.

Findings: Almost all self-portraits were taken outside in nature. People talked about their love of the natural world and the enjoyment of farming and herding. They urged Ladakhi people to respect the interdependent relationship between humans and nature. In the category of 'landscapes you love', most were set in villages. Narratives praised traditional life including dress, food, and housing. People recognize the ecology as fragile. They were anxious that their way of life might not continue. People found value in tourism if it was less ecologically damaging. Photos of adaptations ranged from local level modified land-use to large projects needing government funding. At the exhibit, tourists were surprised to learn that their vacations caused damage.

Conclusions: Narrative tension exists between remaining self-sufficient and acting as political agents demanding government assistance managing the problems. Resilience was seen in the plethora of ideas people had on how to secure their continued way of life in Ladakh. Since awareness about climate change has been a topic of discussion among Ladakhis for so long, we suggest discussion on the adaptations. Tourists need more information about climate change in Ladakh.

HEALTH, GENDER & HUMAN SECURITY

Impact of COVID-19 in Ladakh

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Ladakh is situated in the northernmost part of India at an elevation between 2550-7742 m. Visited by an average of 5 lakh tourists per year, it encountered its first case of COVID-19 on 18th March 2020. With the virus spread, containment zones were established, and rapid response teams were deputed. During the first wave of infection, a cumulative test of 7,27,283 (2.5 times the local population) individuals was performed, and a total of 24,078 people tested positive. The total fatality rate of the region was 0.71% as compared to the national average of 1.5%. Social structure factors like thin population density scattered all over Ladakh, successful lockdown, and the healthcare system played an essential in the containment of the virus spread. However, the second wave had severe outcomes for individuals with comorbidity and risk factors. After COVID-19, there has been a significant rise in the cases of the thromboembolic phenomenon, like myocardial infarction, stroke, etc., and mental illnesses, such as anxiety, insomnia, etc. However, the healthcare system has changed remarkably in the last three years. Earlier, the samples were tested in the Delhi or Chandigarh facility, but now the laboratories are set up in Leh with advanced facilities like RT-PCR and genome sequencing. New oxygen plants with increased oxygen capacity were planted along with more intensive care units. Additionally, the isolated areas of Ladakh were provided with 24*7 telemedicine consultations and free ambulance services. The vaccination drive proved successful, with the population of Ladakh being 100% vaccinated. The present challenges for the people of Ladakh include climatic conditions, dependency on the metro cities for advanced patient treatment, remoteness of villages from the health facilities, air ambulances for remote villages, and shortage of trained workforce.

Examining the robustness of the immune system of the people of Ladakh

Kacho Akbar Khan

In the wake of the coronavirus pandemic, there has been a lot of discussion about the human body's immune system. The immune system is the human body's in-built defense mechanism. It is a collection of cells and organs that work together to form the body's defense system. I have served as a specialist doctor in District Hospital, Kargil for several decades. In my experience, most Ladakhis, especially those living in rural areas, still have a strong immune system that they have probably developed over several generations. I argue that this is because of the oxygen deprived altitude, climatic conditions along with the tough and to an extent unhygienic lifestyle in Ladakh until two or three decades. We lived along with our livestock and often drank from the same water sources. The current drinking water supply system is relatively new. Children would play with sheep and goats, which we assumed would help them stay warm. Children would play in the streets throughout the day, while adults worked in the fields or herded the livestock for grazing. Irrespective of everything else, very few people, be it an adult or a child, were in the habit of washing their hands. And when people did wash hands, it

was with plain water as soap was a luxury. Similarly, most Ladakhis were economically impoverished and lacked various facilities, clothes, food, access to medical facilities etc. Most of us relied on traditional medicinal practitioners to cure various ailments. In this paper, I will discuss various practices that Ladakhis followed in the past that helped strengthen their immune system, while others that increased risks of various ailments including cancer. The COVID-19 provided an opportunity to understand the workings of the immune system better. While the pandemic created havoc around the world and people with comorbidities. This has lessons for the future in terms of lifestyle, diet, and traditional practices that will enable the people of Ladakh to live healthy and fulfilling lives.

“Our loved-ones are being burnt alive!” — Buddhism, Medicine, Pandemic Deaths and new Hospice Movements in Ladakh, India

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The COVID-19 pandemic has had numerous transformative impacts on Himalayan Buddhist societies. This presentation explores pandemic responses of a Buddhist community in Leh, the capital of the Western Himalayan Union Territory of Ladakh, India. How did Buddhist nuns who are trained *amchi* (practitioners of Sowa Rigpa/Tibetan medicine) respond to the COVID-19 deaths in 2020/21? I trace the responses of the Ladakh Nuns Association (LNA) and the efforts of its director, Ani Tsering Palmo, to COVID-19 deaths and the trauma that unfolded for surviving family members. Before the pandemic, Ani Palmo was in the process of constructing a nuns' institute and Sowa Rigpa medical school outside of Leh. When people began dying of COVID-19 in the isolation wards of Leh hospital, infected bodies were cremated within a day. Ani Palmo heard the outcry of relatives: “Our loved-ones are being burnt alive!” In Tibetan Buddhist traditions deceased bodies are kept for three days untouched for the consciousness (*namshe*) to fully leave the body. From a Buddhist perspective, early cremation would devastatingly disturb the end-of-life transition. Via social media Ani Palmo persuaded the hospital to keep infected corpses for three days untouched in an isolation room. Her work with the ensuing trauma and pandemic anxieties of families convinced her to turn the newly built, still unfurnished pharmacy at her institute into a hospice. The space was used to quarantine and care for COVID-19 patients, and for grief-counselling. Based on ethnographic interviews with Ani Palmo, LNA nuns, and affected family members, this paper documents this pandemic history in Ladakh. I argue that the nuns' pandemic responses have brought about a fundamental shift of values in Sowa Rigpa medical practice, which traditionally does not include such end-of-life care. The LNA *amchi* are pioneers in integrating hospice work into their Sowa Rigpa community health services.

Sowa Rigpa from the margins to the mainstream

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The formal recognition of Sowa Rigpa by the Government of India in 2010 heralded a phase of major transformation for this medical tradition. Sowa Rigpa is currently being integrated into state bureaucratic, educational, regulatory and healthcare systems, with enormous implications for the way it is valued, learned, practiced and utilised. This paper discusses some of the patterns and effects of these changes, focusing on how they are perceived and engaged with by variously positioned *amchi*. Prior to recognition, many Ladakhi *amchi* were struggling to maintain their medical practices and faced a highly uncertain future. Limited external support, diminishing social status and dwindling incomes contributed to a strong sense of decline among established practitioners, while the lack of opportunities made Sowa Rigpa unappealing to the younger generation. Jumping to the present day, we find more than 40 students enrolled in formal Sowa Rigpa degree courses in the region and over 20 *amchi* working alongside allopathic doctors in government health facilities right across Leh and Kargil districts. Pharmacies are expanding their output to meet the growing demand for *amchi* medicine and the National Institute for Sowa Rigpa has been established in Leh, playing a significant role at the national level. This upsurge in investment and support has ushered in a period of considerable optimism, yet also brings with it new dynamics, questions and challenges. Drawing upon more than 20 years of ethnographic research, this talk reflects on both the positive and problematic aspects of the integration process, while seeking parallels with the wider socioeconomic and political shifts shaping contemporary Ladakh.

Impact of Higher Degree of Market Integration on Economic Security and Social Capital; Empirical Evidence from Pastoral- Nomadic Community of Changthang, Ladakh

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The existence or absence of social capital, especially trust and cooperation is seen critical for understanding the success or failure of effective functioning of institutions, developmental programs and so forth. With the increasing degree of market integration in the nomadic area of Ladakh, there is evidence of changing preference among nomadic community of Ladakh. The younger generation, are leaving their traditional occupation of animal rearing and migrating to cities in search for employment and education for their children. This paper explores the effect of market integration on the economic security of the nomadic population of Changthang and does the effect on economic security in turn has effect on the social capital especially focusing on trust. The data is collected, by conducting primary survey in the region of Changthang and Kharnakling. The data analysis reveals that with the increasing degree of market integration, there is relative increase in the economic insecurity among the people of this region. The growing economic insecurity in turn has a negative impact on the social capital reducing trust and cooperation among people.

Construction of gender through folktales: A study of Ladakh

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This study will explore the construction of gender in society through its folktales. Ladakh is known for its rich oral tradition and culture. The people of Ladakh follow their rich culture as a source of engagement and not just entertainment. The lost dreary winters would keep people together listening to stories and songs. Today when the time and status of the region have changed, the importance of culture and the importance of preserving our own identities need much more attention. Folklore is considered one of the important factors which focus on various structure basis on gender and the roles assigned to it in a particular society. Folklore can be used to maintain or challenge a community's status quo. In other words, we can say that it can be used to express and reinforce acceptance of the dominant norms, concepts and power structures. Folklore can also be used to attempt to dispute the authority of predominant concepts and question power. Focusing on folktales not only helps us in understanding our society better but also gives us an artistic way to work on our shortcomings. This study attempts to uncover the structure of gender in folktales and also to see the conditioning of the mind and behaviour in society. The present study is ethnographic in nature and considers gender construction theories and psychoanalytical theory in the analysis.

CRITICAL DEVELOPMENTS IN URBAN SPACES AND WATER

Urban Dynamics in the Mountain Town of Kargil, Ladakh in the Indian Trans-Himalaya

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Urbanisation have significantly transformed the small towns and cities in the Trans-Himalaya. Kargil town is the second largest urban centre after Leh in the union territory of Ladakh. Urban dynamics are analysed based on multi-temporal approach using satellite imagery, statistical data and field survey. Total population of Kargil town was multiplied from 1,681 in 1961 to 16,338 in 2011 and recorded 3.7% to 11.6% of urban population in the Kargil district during same period. Urban migration from villages to the administrative capital of Kargil district has been a major factor in the growth of residential colonies and settlements. As supplementary factors like administrative offices, commercial areas, district hospital, army areas, banks, college, private and government schools are located in and around of this town. The urban expansion led to sprawls of residential colonies in irrigated areas and steep slopes; for instance, new residential areas of Silmo colony, Andoo colony, Haidery Mohalla and Poyen colony. These new urban settlements are extremely prone to natural hazard. The built-up area was increased from 0.25 km² (1.3%) to 2.30 km² (11.7%) between 1965 and 2020. Similarly, during the same period, Irrigated land and vegetation covered areas increased considerably from 4.51 km² (23%) to 8.56 km² (43.6%) due to the construction of irrigation channels. Accordingly, the barren area decreased from 14.88 km² (75.8%) in 1965 to 8.78 km² (44.7%) in 2020. After opening of Ladakh for international tourists in 1974, the tourism sector in Kargil grew gradually in

the initial stage due to geopolitical tensions in Ladakh as well in Kashmir, later it started to grow rapidly particularly after the ending of Kargil war in 1999 and establishment of LAHDC-Kargil in 2003. The increasing of tourism sector led to construction of hotels and guesthouses. The LAHDC-Kargil, Urban Local Bodies (ULBs), and Union Territory (UT) of Ladakh administration need to take drastic decision with respect the policy formulation and urban planning mechanism of this town.

The urban mountain waterscape of Leh

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Leh is a rapidly urbanising town that experienced a shift from agricultural livelihoods towards incomes mainly relying on the tourism sector. The presented study follows the question how socio-economic change and urbanisation processes in Leh can be characterised, how the hydro-social relations are changing and what kind of water governance results from negotiations between different actors. Methodologically, quantitative social research was combined with in-depth, qualitative methodologies and participatory research. The findings are framed with a conceptual framework called “urban mountain waterscapes”, which is based on urban political ecology, citizenship studies and governmentality/governance studies. Several years of research on socio-economic change and challenges in water governance in Leh found that the town and its inhabitants find themselves in the midst of social, political, and ecological upheavals, impacting the quality, quantity and accessibility of water resources. The limited water resources essential to the everyday life of urban citizens have become increasingly important for the tourism sector and the urbanisation process. The presented study analyses human-water interactions on various scales and emphasises socio-spatial inequalities in Leh’s waterscape. Along with socio-economic shifts, the community-managed water regulation system is replaced by a technocratic scheme, centralising water supply and sanitation. While some of Leh’s citizens benefit from urban restructurings, others are confronted with environmental and social costs, such as a deteriorating water quality and a further reduction in quantity. The study aims at supporting a better understanding of human-environment interactions in Ladakh in order to inclusively create a sustainable urban future in the region.

Concepts of Water in Ladakh Himalaya: A Case Study of Socio-Environmental Challenges and Adaptation Strategies

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People living at the edge of the melting glaciers contribute the least to climate change but are most vulnerable to its devastating impact. In Ladakh, the social and geographical spaces have been intertwined with each other for ages. Cultural and religious concepts of nature influence the management of natural resources and maintenance of the traditional system of order or being. The paper explores this socio-environmental nexus, in the context of water issues in the region, through an analysis of history of ecological knowledge (both traditional and mainstream). It looks at the reconciliation of traditional values, beliefs and practices with environmental sustainability through case studies of joint action plans by locals and other stakeholders. The reorganization of the state of Jammu and Kashmir into the Union Territory of Jammu and Kashmir and Ladakh was a significant event in the recent political history of India. The abrogation of Articles 370 and 35 A has caused a sense of uncertainty among the inhabitants, who are now confronted with the prospect of public-private partnership projects in the region, that have the potential to threaten the sensitive environment, biodiversity and cultural heritage of Ladakh. Villages like Kumik, Rong and Kulum are already facing climate change-induced water scarcity resulting in relocation and loss of territorial stewardship. This ecological stress is further aggravated by the influx of heavy tourism in the other areas. Adaptation strategies, mitigation measures, capacity-building programmes and sustainable initiatives are being undertaken through a collaborative, co-interpretive and co-management approach to build a resilient and sustainable community, with the involvement of local participation, academic researchers, environmental activists, NGOs, policymakers and the scientific community. Case studies of water management, conservation and awareness programs are examined to assess its impacts and challenges. While leveraging such collaborative approaches, the research also examines the practice on ground to highlight areas of dispute and disagreement.

Visible and invisible water resources of Ladakh - A case study from Stok valley

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Cryosphere meltwater plays a critical role in the economy of the cold-arid Trans-Himalayan region of Ladakh. However, the ongoing water scarcity due to climate change with additional demand of water due to higher tourism footprint and rapid urbanization is leading Ladakh towards an uncertain future. Despite the vital importance of reliable water supply, the relative contributions from glaciers and seasonal snow cover melt, together with permafrost thaw to surface and subsurface discharge are largely unknown. Therefore, this study attempts to improve the understanding of regional hydrology, based on the case study of Stok catchment, where snow and glacier meltwater feeds a village of more than 300 households. We quantified long-term surface and subsurface flow through hydrological modelling forced by in-situ, meteorological, satellite and reanalysis data. These model was calibrated with the measured discharge data from two years in order to better understand the characteristics of surface and subsurface hydrology of the catchment. We also investigated the specific contributions from the cryospheric components and from rainfall to the total flow, and water loss through sublimation. A decline in annual discharge with characteristic inter-annual variations was identified over the observation period with about half of the total accumulated flow through the subsurface. We found that snowmelt contribution was highest (~60%) followed by ice melt (~20%) and rainfall (~15%), whereas sublimation contributes to ~8% of the water loss in a hydrological year. The findings and approach of this study are important for applied hydrological studies and planning future water management strategies in the region of Ladakh.

Aufeis in the Upper Indus Basin – Compilation of the first inventory based on satellite imagery

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Aufeis is a common phenomenon in permafrost and cold regions of the Northern Hemisphere that develops during winter by successive water overflow and freezing on ice-covered surfaces. Most studies on the occurrence and hydrological importance of *aufeis* focus on North America and Siberia, while research in High Mountain Asia is still in an early phase. However, its widespread occurrence in the Upper Indus Basin, especially in the cold-arid regions of the Trans-Himalaya and the Tibetan Plateau indicates a need for comprehensive analysis. In order to address this lack of knowledge, an inventory of *aufeis* fields in the entire Upper Indus Basin (UIB) and surrounding endorheic basins was compiled. Delineation is based on recent Landsat and Sentinel-2 imagery for the period 2008–2021 by using semi-automatic and machine learning approaches. In total, over 3700 *aufeis* fields covering an area of about 300 km² have been detected. Their distribution is characterized by an increase in number and size towards the Tibetan Plateau and a distinct elevational range from 4000 to 5500 m a.s.l. Water overflow mainly occurs between January and March and is highly variable on the intra- and inter-annual scale. Potential water sources feeding *aufeis* are often located close or within wetland areas, suggesting close hydrological interactions. The study contributes to an improved understanding of *aufeis* development and distribution in cold-arid environments and will help further comprehensive cryosphere studies in High Mountain Asia and beyond.

HISTORY & HERITAGE

The petroglyphs of Ladakh: revival of a beautifully rich history

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The purpose of this paper is to present the rock art corpus documented by the authors collectively, which represents over 700 hundred sites at the time of writing. To put this figure in perspective, less than a decade ago, the most comprehensive study of this material was based on a corpus of 150 sites. These new sites offer fresh insight into Ladakh during the Ngari Skorsum period, the Tibetan empire, the Kushan & post-Kushan periods, the

Iron Age, and the Bronze Age: what we can understand of these periods thanks to rock art and surrounding remains largely enhances how Ladakh is presented in classical literature. This corpus is the result of extended surveys conducted in collaboration with INTACH (Indian National Trust for Art and Cultural Heritage) and with the Centre for Rock Art Studies & Heritage Conservation (University of Ladakh). Among the material covered in this presentation are the highest petroglyphs in the world (above 5200 m); an array of sites that shed light on an undescribed style of petroglyphs specific to western Ladakh toward the turn of our era and the 1st millennium CE; series of new rock inscriptions both in Brahmi and in Tibetan, that bring new insight into the evolution of the shapes of votive chortens before the Tibetan conquests and into the early phases of Buddhism in Ladakh; series of sites that bring an evolution to the discussion on the geography of styles during the Bronze Age; etc. This presentation will also introduce the largest and most comprehensive open-source database on the heritage of Ladakh.

A Study to Unearth the Ancient Iconography and Significance of a 2500-Year-Old Monastery; Phugthar Galdan Zangpoling

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It is recorded in most of the historical documents, and historians too believe that Phugthar monastery is one of the oldest and richest (in terms of old artefacts preserved) Monastery in the Zaskar region. This monastery is structured over a huge natural cave and traditional narratives that this natural cave was once the meditation cell of Arhat Kalki (Phagspa Dusdanⁱ) one of the Sixteen Sthavirs (*gnas bstan bcu drug*) It is also recorded in some historical account that the well-known international translator from Zaskar, Phagspa Shesrabⁱⁱ founded Phugthar Monastery in 1070 AD. However, emerged a Gelugpa stronghold with the visit of Byang-sems Shes-rab bZang-po (1395–1457 AD). The monastery has a long history that dates back over 2500 years. There are hundreds of frescos, thangka paintings, artefacts, scripts, statues, wall paintings, and statues of protectors and deities are available. and most of them are made with natural colours. Therefore, it is very interesting to conduct research on such facts and bring them into the world of the general public. Also, it has a great potential to review the ancestral source of technical method of making iconography. Hence, this paper aims to study the broad feature in an inclusive manner. The research would be based on primary and secondary data. To approach the primary source, the historical sources shall be analysed and methods of interviews, interactions and observations will also be used to find the crucial sources. The secondary data will be collected from literary sources, observation study, libraries, frescos, paintings, artefacts and manuscripts etc.

The influence of Bonism in Ladakh

Mohd Sadiq Hardassi

Ladakh is home to a diversity of ethnic communities, religious groups, and linguistic groups. Each of these groups has their own unique cultural systems. Despite this diversity, there are a number of common beliefs and practices that are still practiced by a number of these groups irrespective of their ethnic, religious and linguistic differences. Many of these practices can be traced by the animistic religion of Bonism, which was prevalent across the Tibetan sphere until the introduction of Buddhism in the Eight Century. This paper will highlight specific beliefs and practices to explore the social and environmental impacts of such shared rituals, practices and beliefs that influenced by Bonism, and are still prevalent amongst the communities (both Muslim and Buddhist) in Ladakh. It will also briefly discuss the origin of Bonism and its introduction in Baltistan and Ladakh. I will write my paper based on interviews, study and participation in prevailing practices and also the earlier works.

Heritage sites in Nubra Valley

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Nubra Valley is a sub-division of Ladakh that is located in north of side from Leh. in the eastern side is located Ugur Xianjiang and the western and northern sites are connected to the Pakistan border. It is 3000 meters above the sea level. The valley is surrounded by mountain ranges. Nubra was a separate kingdom from the rest of Ladakh until the 16th century. Due to several invasions from the Hor Ugur xiangjang side, it was combined with Leh Ladakh during the reign of Tashi Namagyal in 16th Century and Kharpochey Khar was palace of nubra's king Tsewang Stanba and Nima namgyal in 17-18th century. People in Nubra speak a dialect that is similar to Main Tibetan

Language. The majority of people in Nubra practice Buddhism, which is came through the Tibet. There are three larger monasteries: The Disket Monastery, constructed in the 14th century and dedicated to the Gelugpa Tradition of Tibetan Buddhism, Samtanling Monastery, founded in the 19th century also dedicated to Gelugpa Tradition, and the Yarma Gonbo Monastery is the Drukpa Kargyud pa Tradition. there is also a small monastery on the mountainside that faces Panamik settlement is Antsa Gonpa Antsa means for isolated place is same age as Disket Monastery. There are numerous petroglyphs depicting animals, humans hunting, and Buddhas. Deer, horses, and camels as well as Buddhist Buddha's sculptures like those of Mitreya Buddha, Wisdom Buddha, goddess Tara, and Stupa have been painted by traders and Buddhist monks. Nubra is consider to be important part of silk route which connected central Asia and rest of the regions.

Conservation of Architectural Heritage in Ladakh

John Harrison

I gave a talk with this title at the 2007 conference in Rome, and thought that after 16 years of "new directions and challenges" the subject might merit revisiting. Much of what was considered "architectural heritage" in 2007 has survived; some has been conserved, by a variety of actors, and some still languishes. Much more has been, and is still being, documented, as researchers dig deeper into the past and the more remote corners of Ladakh. The vernacular architecture grew out of village communities of subsistence agriculture while creating the wonderful art and architecture of the early Buddhist temples. But new forces are impacting on the life and culture of Ladakh; in addition to the wider socio-economic changes and conflicted frontiers to north and west there is now mass tourism and climate change. What will survive of traditional building in the 21st century?

Dogra subjugation and colonial intervention: Ladakh in the 19th century, an epochal phase

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Ladakh witnessed an important event in August 2019, when it was separated from the state of Jammu and Kashmir and acquired the status of Union Territory. In the phase of transition that followed, we are confronted with various discourses concerning the future of Ladakh. And as these debates and discourses are significant in the explication process about the future, one must not dissociate from a historical past, which also steered an era of transition. One such phase of transition that Ladakh witnessed in the past was with the Dogra conquest (1834-1846), when it lost the independent political status. This period of changed political dynamics in Ladakh was also concomitant with the emergence of another external influence in the form of colonial intervention. Such epochal state of transition and intervention, which endangered new conditions and circumstances needs deliberations to understand the response of Ladakhis. Until then, Ladakh succeeded in upholding its independent political identity, even after facing external invasions from Tibet, Kashmir and Central Asia. However, the period chosen for this study unfolds a scenario when Ladakh witnessed a state of dual intervention in the form of Dogra administration and colonial interference. The administrative and political contingencies that were created in Ladakh under such conditions forms the theme of this paper. This work attempts to investigate the stages of confrontations and conformity that emerged between the Dogras and the British authorities, while administrating Ladakh. Reflecting on this significant phase on the historical trajectory of Ladakh is pertinent in making an assessment of the social impulses and reactions, which could be relevant in understanding the response of Ladakhis under such phases of transition. For the bulk of this work, I have consulted the archival documents, comprising Dogra and British records from both National and State Archives. Supplementary readings, mainly consisting of secondary sources have been consulted which provided additional information and contributed in making an assessment based on the theme.

SUSTAINABLE DEVELOPMENT

Sustainability of Ladakh's Ecosystems and Livelihoods: Challenges and New Opportunities

Blaise Humbert-Droz

In recent decades, Ladakh has witnessed tremendous change linked to its strategic importance, the rapid development of new means of communication with other parts of India, and the effects of climate change. From melting glaciers, extreme weather events and erosion of biodiversity to the exponential growth of infrastructure, tourism and defence activities, these momentous developments present the region with numerous environmental

challenges as also socio-economic opportunities. This paper, based on yearly environmental surveys starting in the mid-1990s, examines the impact of these major changes on the natural environment, traditional land-use and Ladakhi livelihoods. While the warming climate has positive effects in some biotic communities – some plants and mushrooms grow at higher elevation, a few new bird species have appeared or are able to breed in Ladakh – a higher frequency of floods and droughts, reportedly linked to it, have a negative impact on both flora and avifauna, through habitat degradation and reduced breeding. Moreover, declining population trends in birds and other fauna are in evidence throughout the study period, indicating that further triggers of environmental change are at play. Overstocking – the wild ungulate population is now less than 5% that of their domestic relatives –, pollution and direct disturbance from booming tourism, heightened military presence and related infrastructure, appear to be the main factors behind environmental degradation and declining biological resources. Such anthropogenic impacts coupled with climate change threaten the long-term sustainability of ecosystems and livelihoods, calling for urgent protection of the natural resource base. The paper makes practical recommendations to this effect, focusing on direct involvement of the resource-users themselves – local communities, tourism industry, defence forces – to minimize pressure on fragile habitats. Finally, new perspectives on a resilient and self-sustaining Ladakh are highlighted, including – recent declines in livestock numbers, beneficial for grasslands and wildlife, provided pastoralists maintain rights over pasturelands, – an ambitious initiative, to convert most villages to organic farming, and – a move towards a carbon-neutral Ladakh through wider solar projects, provided herders do not lose access to prime grasslands in the process.

Poultry Rearing: A Challenge and an opportunity in High-Altitude of Leh-Ladakh region.

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Ladakh comes under high-altitude region located at an altitude of 3500 meters above mean sea level characterized by extreme environmental temperature, hypobaric-hypoxia, and low humidity; all of which together pose certain challenges for successful livestock rearing including poultry. People consume frozen chicken and stored eggs imported from lowland to meet their nutrient requirement, especially during the winter season. Still, there is a shortage in supply due to road closures during winter and stored frozen chickens are not that advisable from health perspective. Considering all the issues, there is a huge opportunity for poultry rearing in the Ladakh region. Regarding this, Defense Institute of High Altitude Research (DIHAR) is working on different breeds of chicken (White Rock, Black Rock, Red Cornish, Chabro, Kadaknath, etc.) to study their growth performance, survivability, egg production performance and hatchability in high altitude. It was observed that chickens reared at high altitude grows slower as compared to reported findings of chickens in lowland indicating a high altitude stress. Feed conversion ratio was also observed to be higher in chickens at high-altitude. Similarly, mortality was high in chickens at high altitude. Egg production performance of these breeds of chickens were again low as compared to chickens in low land. Poor performance of these chicken maybe due to high altitude induced stress and its extreme environmental conditions. Ladakh needs a chicken breed that is more adapted to its environmental condition to fulfil the gap between demand and supply of fresh chicken products. Therefore, an extensive study in regards to poultry growth, reproduction, molecular characteristics and survivability will further help to identify and establish best performing breed of chicken adapted to high altitude.

Exploring the intersection of traditional knowledge systems and sustainable development goals in Ladakh's high mountain Balti community: An analysis of interdisciplinary dialogue and its potential for promoting sustainable development

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The high-altitude Balti tribe in Ladakh possesses a wealth of traditional wisdom that has been passed down through the centuries. This knowledge system consists of practices and beliefs that have helped the community sustain itself in a challenging environment. However, these traditional knowledge systems (TKS) have significantly diminished with the rise of capitalism and globalization. Meanwhile, the United Nations has formulated 17 Sustainable Development Goals (SDGs) to be accomplished by 2030. These goals include sustainable cities and communities, focusing on traditional knowledge systems as facilitators for sustainable societies. The convergence of traditional knowledge systems (TKS) and Sustainable Development Goals (SDGs) attainment allows the high mountain Balti population to conserve their traditional knowledge while encouraging sustainable development. This study draws on ethnographic research conducted in the Nubra Valley region over the last year, which includes

interviews with Balti community members and meetings with specialists in traditional knowledge. The study investigates the potential for multidisciplinary dialogue to support sustainable development in the Balti community and identifies some significant problems that must be addressed to fulfil this promise. The paper notes that there is a substantial possibility for interdisciplinary discussion to assist sustainable development in the high mountain Balti population, particularly in areas such as water management, agriculture, and tourism. The study also discusses some critical tribulations that must be addressed in the region to realize the full potential of traditional knowledge systems and SDGs. These problems include improving collaboration among many stakeholders, addressing power inequalities, managing tourist influx, and overcoming opposition to change. The paper underlines the significance of multidisciplinary dialogue in supporting sustainable development in the Balti community and throughout the mountain population in Ladakh. This research provides insights into how traditional knowledge systems can be preserved while promoting sustainable development and highlights the need for further research and collaboration in this area.

Rendering futures

Sophie Day

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In *Rendering Houses in Ladakh* (Routledge 2023), I describe futures that are built as well as imagined. I present three examples. 'Nothing has changed', says a friend in a newish house built on the family threshing floor. Despite the loss of village land to new buildings and flood damage *inter alia*, he said, 'we are just the same,' 40 years on. A house of similar age a few miles away was built by and for elderly village nuns as a place to rest, but it began to lose its status as a retirement home when a cohort of young recruits arrived and settled: there was no longer space for elderly villagers. My third example comes from the father in a house-hotel occupying the footprint of a previous family home in Leh. He explains, 'Today it's the Buddhists who divide and the Muslims who stay together.' Still regretting the loss of his previous house, he plans to rebuild it on a small scale that will acknowledge changes in home life and speak to stereotypes about the rendering of Ladakh's different houses. In rendering – and simplifying – their houses over many decades, Ladakhis have also domesticated various ruptures and discontinuities. They have materialised more-or-less liveable futures, tethered to familiar experiences and (dis)agreements about previous practice. The editing of house materials is a slow process that necessarily builds futures-past. In alternative registers, the near future seems to be saturated only with uncertainties (Guyer 2007) while the more distant future appears positively dystopian. Here, houses may turn out to be after the fact, as a Leh friend recognised. She had resolved her lack of water but failed to anticipate problems with excess water, namely floods. Speculating about climate changes, she immediately saw their geopolitical dimensions, 'Ladakh will most likely hold within India for a while but fall eventually to China'. Chinese interests, she thought, pointed towards the consolidation of access to Himalayan water and transport routes to the coast. My friend wondered if she should move south while she still could.

Gender and Energy in the future of Ladakh

Kunzes Dolma

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Ladakh has rich source of untapped renewable energy, one of the reasons for major renewable energy projects worth more than 23329722659 (23.329 billion) Euros being planned which is around 13% of the European Union budget for 2023 which is 186 Billion Euros (2023 EU Budget, 2022). Energy is THE deciding factor for development of any economy and not including half of population (women) in this process could have lot of negative implication. Inclusion of women in this process right from the inception of project is crucial for the success of any project. When decision making, absence of women voices would mean absence of what is the energy needs of half the population which could further impact the whole forecasting of energy demand as most of the energy is required for services like heating, cooking, household chores which are done by women. Women are directly connected to the environment during their daily chores like collecting fuel for heating, cooking, fetching water from the rivers for the fields and garden, being the shepherdess in the mountains taking care of the cattle. As such they are more affected by any kind of development being done here and are more susceptible to climate change than man. Any kind of infrastructure development in these areas will affect the landscape which in turn will affect the ecology around that area and hence directly affect the women. It is therefore very important to get the feedback, suggestions, voices of women in planning and implementation of any kind of infrastructure development and not

only energy. Hearing their voices and making them part of decision making will break the beautiful myth of gender equality prevailing in Ladakh.

NEGOTIATING IDENTITY AND CHANGE

Tulku, Soldier, Spy? The Curious Case of the Tibetan Tulku of Thikse

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The recognition of children as the reincarnations of specific Tibetan Buddhist teachers and practitioners has been a source of fascination for Western travelers, scholars and missionaries, but is also a matter of intense interest and debate among Himalayan Buddhist populations. The presence and qualities, including family ties, of a Tulku or Skushok as they are commonly referred to in Ladakh can have a significant impact on the fortune and prestige of the monastic institutions with which they are associated. The question of succession, including the identification, education and assumption of responsibilities of a Tulku are fraught with spiritual, political and economic risks. Who gets to determine which child is the unmistakable reincarnation of a particular tulku? And what if the child does not live up to expectations, or simply chooses not to follow the destiny the institution has in store for them? This paper presents the case of the 8th incarnation of Byang sems shes rab bzang po, the 28th abbot of Thikse, Byams pa chos 'phel. Born in Lhasa in 1895, his remarkable life story can be pieced together from the few testimonies of travellers and missionaries who met him, and from the many second- and thirdhand accounts, including different versions about what happened to him after he left Ladakh for good in 1920 until his death sometime in the 1940s. Examining a wide range of sources, in Ladakhi, Hindi and a number of different European languages, this paper seeks to show how different authors use the dramatic stories about his life and fate to serve different agendas. Examining disparities between versions of his life and the purposes to which they are put sheds light on the contested representations of the Tulku system and Tibetan Buddhism more generally. While the stories of the Tibetan Tulku of Thikse and his legacy are unusually dramatic, they also offer insights into the dynamics of early 20th Century intra- and intersectorian dynamics and their relation to political shifts in emerging modern politics in Ladakh.

Spiti as a 'tribal area': interrogating local control and apprehensions around development in Ladakh's Himachali neighbour

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Historically, the Spiti region, today a part of Himachal Pradesh (India), was a part of the kingdom of Ladakh. Today, the two neighbouring regions continue to share many cultural, linguistic, and religious similarities. But beginning in the 1840s, during British colonial rule, Spiti and Ladakh embarked on trajectories that would eventually turn them into politically very different regions. At that time, Ladakh became a part of the princely state of Jammu and Kashmir, while Spiti became a part of the Punjab Province of British India. After 1947, Ladakh became a part of the Jammu and Kashmir state (India), and Spiti, in 1966, became a part of the upcoming state of Himachal Pradesh. Since the adoption of the Constitution of India in 1950, Spiti and Ladakh have had some similar and some different legal provisions for safeguarding local land rights, cultural heritage, political representation, and reservations in higher education and jobs. But following the abrogation of Article 370 in Jammu and Kashmir, a gap has been growing between the two regions, in terms of their political status, and the various protections and provisions available in them. Through this presentation, based on my ongoing doctoral project, I reflect upon some stories from Spiti's experience of two contemporary sources of livelihood – cash crop agriculture and mass tourism – while being a 'tribal' area of Himachal Pradesh listed under the Fifth Schedule of the Indian Constitution. Through this discussion, I trace certain local strategies of manoeuvring legal provisions as well as a particular anxiety of the Indian state, so as to protect local control over Spiti's resources, and to sustainably harness these resources.

'We need unity like the Ladakhis': The Desires to be alive in Lahaul.

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"Look at Ladakhis, how good they are in keeping their culture alive" is a sentiment often evoked by Lahaulis, a self-evaluation on the community's lack of vision for 'cultural' preservation. Ladakh for many Lahaulis signifies cultural richness, cohesion, and entrepreneurship. Lahauli youth, especially, are looking at the 'Buddhistness' of Ladakh as a desirable template to replicate, to map the fluid boundaries of their own cultural world. Ladakh is also seen as a familiar source for channeling traditional knowledge systems for designing a possible sustainable future for Lahaul. In this presentation, I will bring four examples of nascent social entrepreneurship initiatives of young Lahaulis, their aspirations, challenges, and experiences as they both manage and shape the transformations that are occurring in the Trans-Himalayas. These narratives will be located within my larger inquiry on how the recently connected Rohtang tunnel is propelling a patchy ecological 'rethinking' in the Lahaul valley. Alongside, I will also draw from writings in the Hindi language Lahauli cultural magazine Chandratal to analyse the shifting conceptions of home, environment, politics, and business. I will argue that attending closely to the fragmented unfolding of Buddhist 'consciousness' in Lahaul is a generative entry point for knowing the tunnel's intimate entanglements.

Buddhist Nunneries Around Leh: Created and Destroyed by Modernity?

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The Ladakhi nuns' emancipation movement, which started around 1995 and which was propelled by global Buddhist modernist movements, has been quite successful, as in a mere 25 years it succeeded in turning the nuns' situation completely around in the wider Leh region. Compared to the early 1990s, when the nuns' *sangha* had crumbled and nuns mainly resided at their ancestral home, the area can now boast of several nunneries, brimming with young nuns. Moreover, whereas before nuns often remained illiterate, today's nuns can pursue a full-fledged secular and monastic education, to become high school teachers, *geshemas*, and *amchi* doctors. However, even though the influx of global movements helped to resuscitate the female *sangha* around Leh, the region's continuing globalization could also signal its end. Increased secularization might require nuns to continue leaning on international sponsors for survival, who might back out in the wake of a new global crisis. Further, as the nunneries are no longer able to attract local girls, and present-day recruits typically hail from far-off places like Zaskar, the foreseen modernization of rural Ladakh might dry up the nuns' recruitment source. Additionally, the nuns' increased incorporation into Tibetan nunneries outside of Ladakh might cause a brain drain extracting the most qualified nuns, who might never return to Ladakh. Is the female *sangha* around Leh thus slowly but steadily undermined, as its patronage, recruitment source, and most learned members are slowly excised? Consequently, even though the female *sangha* around Leh has created a window of opportunities for women seeking to tread a spiritual path, this window might close if upcoming challenges are not confronted soon, ultimately causing these new openings to be lost in a not too distant future.

Dynamics of cultural innovation in the Buddhist Monasteries of Ladakh

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The purpose of this paper is to present and examine dynamics of cultural and religious innovation implemented by the main Buddhist monasteries of Ladakh. With a focus on Hemis, it explores new practices that have emerged in response to major challenges met in the historical past and parallels with the 21st century challenges of globalization, urbanization, and cultural transformation. Historically, the royal monastery of Hemis and its founder, Taktsang Repa (1574-1652) have spearheaded the development of a series of new religious practices for the communities of Ladakh, such as the collective Mani recitations and the development of non-monastic centres of advanced practice. Furthermore, Hemis was closely associated with Tibetan monasteries and Tibetan Buddhist masters, but the association with Tibet was drastically challenged by the "Mongol War" (sog po'i dmag, 1679-1684), as from the end of the seventeenth century, connections with the new Tibetan State of the Ganden Phodrang were heavily constrained. However, the religious and political leaders of the kingdom of Ladakh resorted to various strategies that not only allowed Hemis to adapt, but also to develop as a dynamic powerhouse for the Buddhist practice of the entire Ladakhi community. One of the most successful development was enhanced networking with Bhutan. Another innovation was the creation of the Hemis Festival and other religious festivals at Hemis and its brother monastery Chemrey, revitalizing the Buddhist culture of Ladakh. Parallels can be studied with the

innovations implemented at Hemis in the first decades of the twenty first century and underway, which include new international networking –with Bhutan in particular, but also beyond–, the creation and development of the grand Naropa Festival, and the new grand collective practice of Senge Tsewa, for which thousands of lay and monastic Ladakhis congregate every month.

Purity in the Age of Pollution: Perceptions of Change among the Brogpa of Ladakh

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Brogpa is a small ethnolinguistic community in Ladakh, residing in three villages in the Dah-Hanu area along the Indus valley. The social, environmental, and economic changes in the region today affect its traditional worldviews and associated cultural practices and bring about their transformation and fragmentation. The present paper examines the changes within the community in relation to two notions central to its cultural codes, namely *shichu* and *chutu*, roughly translated as 'pure' and 'polluted'. The concept of *shichu* that has maintained Brogpa's religious and social order is now perceived as disrupted by the introduction and normalization of foods and practices once perceived as *chutu* or 'polluting'. The sudden abandonment of Brogpa's mythical understanding of reality and its replacement with new systems of knowledge evoke anxiety and regret among many members of the community. Along with people, these changes also distress some of the local deities *lha*, embodied by the religious specialists *lha-pa* and *lha-mo*. Displeased with the scarcity of proper food offerings and presented with the sufferings of the modern person, the deities voice reflections and provide guidance, reaffirming traditional values. These tensions are articulated in the emerging self-perception of Brogpa as *chutu* – a state in which illness and misfortune are believed to occur and which starkly conflicts with their traditional identity. Torn between the virtues of the past and the prospects of an uncertain modernity today Brogpa are adapting to change by extending the old merits of *purity* into a romanticised identity of 'pure' Aryanness.

Migration and Ancient belief of Shin Dard People of Karkit-Drass Ladakh

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Karkit, Kaksar and other parts of Drass (in Ladakh, India) have always been difficult to access. This is due to the mountainous terrain and unavailability of motor able road connectivity and due the prevailing security instability (certain areas are still off limits for foreigners due to the LOC (Line of Control – India-Pakistan). Hence, there has been no research undertaken in this area over the past years. Through this paper an attempt will be made to know the old beliefs, migration and language of the people of this area. The present paper attempts to revive the interest in these neglected regions by examining ancient traits of shamanism and Hinduism, as well as the worship of pre-Islamic and pre-Buddhist deities, still prevailing around Karkit and other parts of Drass area. The language here still has those ancient Indo-Aryan or Vedic words which connect them with an ancient community of India. Their belief can also be known from the words in their language like *Dev*, *Deva*, *Rachi*, *Yash*, *Sury*, *Kaal*, *Sindh*, and many more. Which are also found in the ancient Vedic language of India. In this community, the names are more of Hindu religion, but the belief of shamanism is more, which raises many questions in the field of research. Besides, some ancient Hindu names in Karkit like *Rama* and *Naran* (very close to Hindu names; *Ram* and *Narayan*) are also found around Astur and Chilas. If we say that Karkit is towards India so these names come from Indian influence later, then Astor and Chilas are not with India then how come these names are found there? Apart from this, the author will try to trace the history, language and migration of these people from *Chilas*, *Kohistan* and from *Gilgit* and *Astor* to *Kharmang*, *Drass* and *Karkit* area of *Ladakh*. It does so by elaborating on the changes the old Dardic belief system underwent in order to adapt to the missionary efforts of "world-religions" conquering the region. The migration of Shin-Dards in Karkit and Drass region is said to be around 8th century or in 9th Century A.D. It is possible that this migration in Drass took place in two stages, because the statues of *Buddha* near Drass may be older than the 8th or 9th century. On the other hand, the history of the stone of *Bhimbat* (*A large stone attributed to Bhima, one of the five Pandavas in Hindu mythology*), at Drass is still a mystery. Similarly, the presence of '*Draupadi Kund*' a lake near *Matayin* at Drass, attributed to *Draupadi*, the wife of the *Hindu Pandavas*, suggests an older date than 8th A.D. Have these Shin people ever adopted Hinduism in ancient times? Some have also said that there were *Shin Pandits* in Gilgit till the 19th century who existed till the *Dogra rule*.

DECREE LETTERS & PHOTOGRAPHY AS HISTORICAL ARCHIVES

Two German Perspectives on Ladakh from the Early 20th Century

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The first decades of the 20th century, before the First World War, were a time that provided an opportunity to travel the world for those Europeans who could afford it – a possibility that quickly disappeared with the outbreak of the war and its aftermath. In this paper I would like to present two German views of Ladakh from that time in the form of letters and photographs. The first perspective is concerned with the journey of my grandfather, Otto Honigmann (1879-1959), who had the opportunity to travel in Kashmir, Ladakh and Baltistan between May 1911 and May 1912. He went from Srinagar to Leh, and from there to the Hemis festival and Rupshu, and visited Nubra, Baltistan and Leh twice before returning to Srinagar. His photographs and letters to his mother went back to Leh in 2018 in the exhibition "Kashmir, Ladakh, Baltistan 1911/12", organized by the Museum Fünf Kontinente in Munich in cooperation with the Ladakh Arts and Media Organization, and they remain there in the archive of LAMO. The second perspective is provided by Sebastian and Amalie Schmitt, Moravian missionaries whom Honigmann made friends with in Leh. Sebastian Schmitt (1874-1956) served in Leh from 1906-1913, and for most of this period ran the mission hospital. He took many photographs, which document the wide range of people he met through his medical work, among them the royal family and the Hemis Rinpoche. Likewise, the letters of Amalie Schmitt (1878-1950) provide a vivid account of her everyday concerns for her family and her engagement with the country. Thus, the Museum and LAMO are planning to bring this second perspective back to Leh in an exhibition. The study and research of visual archives is vital to raise awareness of the changing landscape of Ladakh. For this reason, it is particularly important to bring historical photographic collections back to the country.

Ladakh revisited: Using Repeat photography to assess environmental change

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The classical method of repeat photography has often been used for the documentation of changes in landscape structures, glacier conditions, urbanisation processes and in various other research fields. Selected case studies from Ladakh are presented to demonstrate that the standardized and well-established method of bi- and multi-temporal photography serves as a useful tool to visualize processes of change and persistence, especially in combination with remote sensing data. Presented examples range from glacier retreat to urban expansion. The applicability of the method is shown for the documentation of both rapid and long-term slow-onset changes using historical photographs and photographs of various seasons.

The research status and significance of decree letters in Ladakh

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The decree letters of Ladakh and Tibet are an important research resource for the study of Ladakh and Tibet's history. We cannot ignore it because of its vastness in terms of quantity and its content. For instance, ancient palaces, monasteries, temples, and even some individual families in Ladakh have kept thousands of scattered decree letters. These decree letters are an inevitable resource for research on different historical periods of Ladakh, but no researchers have ever done thorough research on them and moreover, nobody has ever started to edit and preserve these important decrees in a qualified manner. The decree letters of Ladakh have a history of over 400 years and the contents range from political, religious to regional policy etc. I have visited Ladakh twice and I have seen more than 70 decrees at Mangtho monastery and Hemis monastery etc. and I had the great privilege of copying and photographing some of these decrees. For the upcoming conference on Ladakh, I will present my research paper on the decree letters of Ladakh.