



# HIMALAYA, the Journal of the Association for Nepal and Himalayan Studies

Volume 26  
Number 1 *People and Environment:  
Conservation and Management of Natural  
Resources across the Himalaya No. 1 & 2*

Article 24

2006

## Association of American Geographers Meeting Conference Abstract

Follow this and additional works at: <https://digitalcommons.macalester.edu/himalaya>

### Recommended Citation

. 2006. Association of American Geographers Meeting Conference Abstract. *HIMALAYA* 26(1).  
Available at: <https://digitalcommons.macalester.edu/himalaya/vol26/iss1/24>

This Other is brought to you for free and open access by the DigitalCommons@Macalester College at DigitalCommons@Macalester College. It has been accepted for inclusion in HIMALAYA, the Journal of the Association for Nepal and Himalayan Studies by an authorized administrator of DigitalCommons@Macalester College. For more information, please contact [scholarpub@macalester.edu](mailto:scholarpub@macalester.edu).



# CONFERENCE ABSTRACTS

## Association of American Geographer's Meetings March 7-11, 2006 Chicago, Illinois

### **The International K2 Project: Exploration and Assessment of Surface Processes in the Karakoram Himalaya**

Michael P. Bishop, University of Nebraska-Omaha

John F. Shroder, University of Nebraska-Omaha

The Karakoram Himalaya has topography whose origin is not well understood, although the erosion/uplift feedback mechanism is recognized as a primary controlling factor. Consequently, there is a need to better understand climate forcing and the role of alpine glaciation, mass movement, and other surface processes on denudation and relief production. As part of the international K2 project, we highlight our summer 2005 field expedition results in the Shigar, Braldu and Baltoro valleys, and discuss these in the context of erosion and landscape evolution. Fieldwork consisted of geomorphological mapping, hazards assessment, rock and sediment sampling for exposure age dating, spectral analysis and erosion modeling. In addition, field and sensor measurements were acquired for assessing atmospheric, glacier and glacier surface energy-balance conditions. We have verified the occurrence of gravitational collapse in the Buspur sackung failure. Smaller scale mass movements include a multitude of rock falls and slides, as well as profuse debris flows. In addition, flood boulder deposits document the occurrence of numerous catastrophic floods caused by landslides and glaciers. The Baltoro glacier is rapidly downwasting and its ice thickness is approximately 300 m at Concordia. Our results set the stage for assessing erosion and relief production utilizing landscape evolution modeling.

### **Re-engineering Rice Farming: Responding to Climate Change in Nepal**

Netra B Chhetri, Arizona State University

The development of technological solutions to minimize risk from current climate can lead to two possible outcomes: increase in agricultural productivity and insights about adaptation to future climate change. I have used the hypothesis of induced innovation to assess the relationship between climate and development of innovative technologies in rice based cropping system of Nepal. Through relevant case studies and examples, this study also examined the extent to which research establishments have provided farmers with technological options to alleviate climatic constraints in rice cultivation. I find that rice productivity has increased steadily across the districts of Nepal during the period of 12

years, showing a definitive growth trajectory. However, this growth masks disparities in productivity caused by apparent differences in climatic resources across different regions of the country. I also find evidence that the research establishments in Nepal have developed technological innovations as a buffer against the deleterious effect of climatic risks.

### **Reconstruction and Modernization Challenges Facing the Afghan Geodesy and Cartography Head Office**

Peter George Chirico, United States Geological Survey

The Afghan Geodesy and Cartography Head Office (AGCHO) is the national mapping authority of the Transitional Islamic State of Afghanistan. AGCHO, which was established in 1958, has sustained grave damage to its human and physical resources during the past 25 years of political upheaval. Bureaucratic and administrative changes are required at AGCHO to overcome the stigma of an agency formerly controlled by the military during the Soviet and Taliban regimes. AGCHO's role as the legal mapping authority is undermined by uncoordinated and independent mapping activities performed by other government ministries, NGOs, private sector companies, and foreign governments and by the current lack of National Spatial Data Infrastructure (NSDI) standards. Outdated equipment and methods from the 1960s and '70s for surveying, photogrammetry, cartography, and map printing need to be upgraded and standardized. Modernization of the highly skilled workforce of over 800 men and women will require education and training but may also include staff reductions to ensure financial viability and encourage donor assistance. Research conducted through a series of site visits, interviews, and meetings that took place in 2004 and 2005 reveal the current status and challenges AGCHO faces in its struggle to transform itself into a modern government mapping agency capable of delivering critically needed geospatial data and analysis required for reconstruction planning and implementation. In addition to modernization and training, reorganization around core functions, long-term planning, and attracting donor support will help ensure AGCHO maintains its status as the Afghan mapping authority.

### **Feminist-Nationalism in Afghanistan**

Jennifer L. Fluri, Dartmouth College

The focus on feminism and the nation has largely examined the various ways in which women as a gendered cat-

egory participate in the nation and nationalist struggles. Additional research points to feminist activism within nationalist groups based on specific ideological feminist issues, such as reproductive rights (West et al. 1997; Nelson 2001). However, what is missing from this literature is an example of a feminist organization that is both spatially and ideologically independent from masculinist or patriarchal nationalist organizations and posits its sociopolitical resistance and empowerment goals for women as both feminist and nationalist. This form of feminist nationalism does not simply include women as participants in the development and/or rule of nations rather the feminist-nationalism examined in this article is an active independent political movement that equates feminist politics with nationalist politics. One is not placed on the back burner to light the flames of the other. Thereby equating the ideological constructions of feminism with nationalism, and in the case of this study linking the struggle for women's rights (through feminism) with nationalist goals for democracy and secularism in Afghanistan. These linkages between feminism and nationalism are analyzed by way of examining the spatial politics of the only independent political (feminist-nationalist) organization in Afghanistan—RAWA.

#### **Temperature Response to Land Cover Changes on the Tibetan Plateau**

Oliver W. Frauenfeld, University of Colorado

Tingjun Zhang, University of Colorado

The Tibetan Plateau, with an average elevation of >4000 m and approximately the size of Texas, is a semi-arid environment, both moisture and temperature limited, and is occupied by montane grass- and shrublands. Over 62% of the plateau is used for agriculture: farmlands, forests, and a majority (80%) is used for livestock grazing. Since the early-late 1950s, and accelerated since the 1980s, significant urban expansion and changes in agricultural and industrial practices have shaped this part of the world. Originally a mostly rural (pastoral) region, conscious efforts to urbanize the plateau and analogous socio-economic changes have resulted in a substantially altered landscape. Because of the plateau's role in the Asian Monsoon system, the water resources of most of the Asian continent and therefore the livelihoods of over 3.7 billion people, the extensive land cover/land use changes in this part of the world are arguably of heightened importance to local-global resources and the climate system. We hypothesize that as socio-economic changes have caused a net reduction in vegetation, this has resulted in significantly reduced soil moisture which feeds back to further decrease vegetation, but also increase sensible (versus latent) heat fluxes, and hence increase temperatures. Our related work has already demonstrated that, indeed, reported warming on the Tibetan Plateau seems to be confined to low-lying populated regions. In this present analysis we categorize in situ temperature observations by both land cover type and disturbed versus undisturbed regions, and quantify the corresponding

warming trends related to land cover changes.

#### **Geomorphic and Human Consequences of the October 8, 2005, Kashmir Earthquake**

Ulrich Kamp, University of Montana

Lewis A. Owen, University of Cincinnati

Ghazanfar A. Khattak, National Centre of Excellence in Geology, Pakistan

Jennifer Parker, The University of Montana

Afzal Gulzan, University of Jammu and Kashmir, Pakistan

Edwin L. Harp, US Geological Survey

David K. Keefer, US Geological Survey

Mark A. Bauer, US Geological Survey

The October 8 2005, magnitude 7.6 Kashmir earthquake, triggered several thousand landslides. These comprise mainly shallow failures of rock avalanche type, although translational and rotational landslides, debris slides and debris flows also occurred. In addition, a sturzstrom comprising > 106 m<sup>3</sup> was initiated, that buried 4 villages and blocked streams to create two lakes. Although landsliding occurred throughout a region, stretching » 50 km from earthquake epicenter, the failures were highly concentrated, associated with six main geomorphic-geologic-anthropogenic settings. These settings included natural failures in: 1) highly fracture carbonate rocks comprising the lowest beds in the hanging wall of the likely earthquake fault (the Main Boundary Thrust); 2) Tertiary mudstones and siliclastic rocks along antecedent drainages that traverse the main structure (the Hazara Syntaxis); 3) steep (>50°) slopes comprising Precambrian and Lower Paleozoic rocks; 4) steep (»50°) lower slopes of fluvially undercut Quaternary valley fills; and 5) in ridges and spur crests. The sixth setting, occurred as consequence of human action, associated with highway construction. Extensive fissuring is present along many of the valley slopes and together with the freshly mobilized landslide debris constitutes a potential hazard in the coming snowmelt and monsoon season. This study supports the view that earthquake triggered landslides are concentrated in specific zones associated with the bedrock geology, geomorphology, topography and human factors.

#### **Habermas's Public Sphere and Tibetan Spiritual Landscape**

Christopher J Limburg, University of Wisconsin, Center for South Asia

This paper will examine Tibetan sacred space using Habermas's category of the public sphere. The ability to perceive and engage with spiritual landscape in High Asian Buddhism is related to one's soteriological status: how karmically advanced are you? This religious understanding of class ties socially constructed rules of

in and out to one's existential status. Thus the private and the public are intimately interwoven in Buddhist landscape. To help us understand this relationship, the paper will turn to Jurgen Habermas's rich notions of the public sphere in an attempt to interpret karmic status as it relates to a pilgrim's visionary encounter with gNas or pilgrimage sites. Despite the disparate historical contexts between Habermas's context and Tibetan Buddhism, the relationship between private experience and public expression is still central to understanding the way that Tibetan Buddhist places are made and the way gNas serve as a node of mediation between private pilgrims and private deities through the representation of public space. The argument will tease out the way in which Tibetan culture represents its own public sphere as well as the way its anthropologists have interpreted its variety of notions of what public and private mean.

### **Open Field Notes: Autoethnographic transfiguration of fieldwork encounters in Nepal**

Tom O'Neill, Brock University

Open Field Notes is a retrospective project that spans ten years of fieldwork in Nepal from a dialectical, rather than chronological perspective. Re-interrogating field notes and interview transcripts from an autoethnographic position is an epistemological strategy of transcending the self that constructs knowledge of the "Other", and transfiguring ethnography into a dialogical account that stresses the "in-betweenness" and emergent quality of social life. In this paper, I focus on a series of ethnographic encounters that occurred between a small Tamang village in the Himalayan foothills and the peri-urban ward in Kathmandu that was a destination for migrant labour, entrepreneurship, and a way of escaping rural hardship. Those encounters were instances in which the people I worked with undertook "to represent themselves in ways that engage with the colonizer's own terms", as Mary Pratt (1992) put it. Ethnographers are ironic representatives of global hegemony, and often claim to be in opposition to the subjugation of "Others". In the conversations I had in Nepal, however, my own implication in the unequal power structures that were transforming their lives was frequently commented on by ethnographic subjects. People also sought to engage me in their own practices in ways that transgressed the traditional boundaries between ethnographer and subject. Retrospective and reflexive autoethnography is thus also a strategy of exposing the ethical ambiguities of the fieldwork relationship, and, through that, to work toward genuine solidarity.

### **Afghanistan's Landmine Problem: An Enduring Tragedy**

Eugene J. Palka, US Military Academy, West Point

More than 25 years of warfare have littered Afghanistan's landscape with millions of landmines and unexploded

ordnance (UXO). Despite the efforts of the UN's Mine Action Program for Afghanistan (MAPA), the International Committee of the Red Cross (ICRA), several NGOs, the U.S. military, and the Afghans themselves, the challenge of ridding the country of mines and UXOs remains a daunting task. Demining operations, health care for victims, and threat awareness are complicated by continuing warfare, forced migrations, rugged terrain, educational shortfalls, and poverty. Moreover, the country's transportation infrastructure and austere health-care system are inadequate for accommodating surviving casualties of the past 25 years and new victims each day. Although landmines and UXO contaminate 32 of 34 provinces, this man-made environmental hazard exhibits a distinct geographic pattern, with areas of greatest concentration reflecting former military targets, installations and battlefields. Unfortunately, contaminated areas also extend to cities, villages, agricultural fields, grazing lands, and along principal roads. To better conceptualize this enduring tragedy, this paper addresses the following questions from a military geographic perspective. (1) Where are landmines and UXOs concentrated within the country? (2) Why does this geographic pattern exist? (3) What has been the impact on the local and regional population? (4) What progress has been made to solve the problem and what kinds of programs are still underway? The answers to these questions contribute to a better understanding of the origin and magnitude of the problem and provide a current assessment of the country's greatest man-made environmental concern.

### **Capital City Relocation and the Quest for Alternative Development**

Rajiv Rawat, Department of Geography, York University

In 2000, Uttarakhand was established as the 28th state of India after a peaceful struggle for local autonomy and development. At its inception, Dehradun, the region's largest city, was made provisional capital. However, the demand for a permanent capital at Gairsain, a tiny hamlet at the geographic centre of the state, has persisted, culminating in late 2004 with a series of fast-unto-deaths, relay hunger strikes, and foot marches. The struggle has been particularly intense due to the realization that once made permanent, capitals tend to become fixed in place, thus foreclosing any possibility of fundamentally reordering the political geographic organization of the state. The spatial politics of this bid for capital city relocation raises important questions around notions of modernity, political integration, and identity formation. As such, this paper will explore this controversy both within the context of state theory as well as contemporary debates around globalization, cosmopolitanism, and transnational identities. In addition, a cultural geographic lens will be employed to investigate the encoded meanings of globality and locality at the heart of the quest for an alternative development

model as embodied by a democratic and decentralized vision of the state as advocated by supporters of Gairsain.

### **New Towns in Tibet: Findings from China's 1990 and 2000 Censuses**

Karl E. Ryavec, University of Wisconsin at Stevens Point

This study focuses on the development of new towns in Tibet between 1990 and 2000, and how these new spatial patterns relate to the administrative and transportation geography of the Tibet Autonomous Region (TAR). The towns, called zhen in Chinese, are officially classified as urban places in China. In 1982, there were only 9 such towns in the TAR in addition to the city of Lhasa. In 1990, the number of towns increased to 31, and Shigatse became classified as a city. By 2000, there were 107 towns. Maps showing these new towns will be presented, and analyzed in relation to political and economic factors that led, in part, to their upgrading to official urban status at the time of China's latest census in Tibet in 2000.

### **Multiple glaciations and Landscape evolution of semi-arid northwestern Tibet: a test of buzz-saw hypothesis between the glaciation and its impact on landscape evolution**

Yeong Bae Seong, University of Cincinnati

Lewis Owen, University of Cincinnati

Robert Finkel, Lawrence Livermore National Laboratory

Chaolu Yi, The Institute of Tibet, China

Jong-Geun Kim, Arizona State University

During the Quaternary, multiple glacier systems occupied the valleys of the tectonically active massifs of Mush-tagata and Mt. Kongur. Glacial landforms in Mush-tagata and Mt. Kongur provide evidence for two separate glaciations with glaciers advancing more than 20 km down-valley from the present snouts. The most extensive glaciations occurred during penultimate glacial and early Holocene. In contrast, no glacial landforms indicating extensive glaci-ation during the last glacial maximum are present in the region. The topography and glacier forms in the Mush-tagata and Mt. Kongur massifs vary across a broadly N-S trending high ridge and watershed. The western portion, situated on the stoss slope has steep high topography and small valley glaciers, while on the eastern leeward slopes, gradients are less steep and long debris-covered valley gla-ciers are present. Using glacial geologic evidence, DEMs and glacier equilibrium line altitude (ELA), we test the buzz-saw hypothesis, which suggests that glaciers deter-mine hypsometry, to help establish whether the landscape is a function

### **Landslide- and glacier-lake landform evolution, Braldu Valley and Baltoro Glacier, Karakoram Himalaya**

Jack F. Shroder, University of Nebraska at Omaha

Michael P. Bishop, University of Nebraska at Omaha

Landslide- and ice-dammed glacier lakes in the Braldu - Baltoro valleys of the Karakoram Himalaya have caused prehistoric and historic floods that strongly affected topography. Such lakes are caused by catastrophic slope failures (Gomboro), past ice advances (Biafo), surging (Liligo), tributary junctions (Yermanadu), and pervasive downwasting. Many of these lakes grow larger through time as meltwaters accumulate until they overtop the obstruction or find sub- or supra-glacial egress. Anomalous missing terminal moraines at Baltoro Glacier, massive truncated alluvial/colluvial fans, huge pendant bars, and large imbricated flood-rounded boulders are evidence for past catastrophic floods. In summer 2005 we observed the rapid rise of the large, post-surge Liligo Lake, followed by its abrupt drainage through a crevasse and the rapid fall of lake level at ~25 cm/hr, with floods downstream. Such processes play an important role in rapid denudation of the region.

### **Towards a (Post)colonial Protected Area in the Mt. Everest Region of Nepal?**

Stan Stevens, University of Massachusetts

This paper examines the 2005 drafting of a new management plan for Sagarmatha (Chomolungma/Mt. Everest) National Park (SNP), which was established/imposed in Khumbu Sharwa (Sherpa) territories in 1976. I analyze the process and contexts in which the plan was developed and assess whether the institutional and policy changes it proposes meet current "new paradigm" IUCN policies and guidelines for protected areas in indigenous peoples' homelands. The declaration of SNP thirty years ago reflected an international effort to catalyze the creation of an inhabited, indigenously co-managed, (post)colonial protected area in a kingdom in which discourses of "orientalism" and nationalism had justified and perpetuated two centuries of ethnically and racially-based Nepali "internal" colonialism over indigenous peoples. In the initial park planning American and New Zealand advisors advocated a design which rejected the exclusionary, Yellowstone model which had dispossessed indigenous peoples in their own countries in favor of an approach based on respect for Sharwa self-determination and livelihoods and strong Sharwa participation in protected area management. These intentions, however, were undermined by continuing state territorialism, authoritarian and paternalistic governance, and coercive and exclusionary national conservation practices, all of which are common in Fourth World political ecological contexts. The 2005 plan, while advocating important reforms, continues to be shaped by Nepal social and political constraints. The result falls short of current IUCN recommendations for respect for indigenous rights in protected areas. Nonetheless, if fully implemented, the new plan may enhance Sharwa authority over commons, access to livelihood resources, and voice in protected area management.

## **The emergence of the Green Tibetan in Tibet: environmental collaborations and contingent articulations**

Emily T. Yeh, University of Colorado

The image of Tibetans as inherently eco-friendly has become a globally familiar and integral part of Tibetan exile and Western representations of Tibetan-ness. The production of such representations links Tibetans with other indigenous peoples around the world, about whom green tribal fantasies have been circulated and produced. Scholars have argued, however, that this Green discourse is meaningless for Tibetans living within the PRC. In contrast, my paper discusses the recent emergence of the Green Tibetan within Tibet itself. Using locally produced documents about the relationship between Tibetans and nature, as well as interviews with Tibetan and Chinese environmental activists, I trace the contingent articulation of the Green Tibetan in Tibet. I suggest that the conjuncture of forces that has allowed and conditioned its emergence includes changing Chinese representations of Tibetan-ness, especially the phenomenon I call "Tibet love"; the new discursive regime of global environmentalism, and in particular transnational environmental NGOs and projects which actively seek to foster civil society. Though such projects have been read as part and parcel of a new neoliberal regime of power, or 'environmental governmentality,'

my paper argues for augmenting this analysis with a textured 'view from below' of local agency and creativity. Thus, it asks: What spaces are opened and what possibilities created by the emergence of the Green Tibetan, and what, on the other hand, are its limitations or contradictions, given the conditions of its emergence?

## **Gross National Happiness and the Natural Environment in Bhutan**

David N. Zurick, Eastern Kentucky University

The kingdom of Bhutan is in the midst of transformation as it emerges from its history of geographical and political isolation to a new status as a modern nation-state and participant in the global community. Bhutan's path to development embraces the concept of Gross National Happiness, a philosophy and a policy instrument that seeks to promote social development and manage environmental conservation within a sustainable development strategy guided by Buddhist ethics. This article examines Bhutan's unique approach to development and the governance and environmental policies stemming from it, and assesses their impacts on environmental conditions in the country. Environmental trends documented in resource inventories show positive measures of development. These are supported by landscape analysis using repeat photography.