

Introduction

NEPAL GEOGRAPHIES

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The sheer diversity and lively activity of Nepal geographies makes them difficult to ignore. From the continuous uplift of mountains and itinerant migration of river channels, to the feats of engineering on display in terraced fields and remarkable histories of migration and trade across mountain passes and floodplains, Nepal is a place where the “environment”—produced through intertwined social and biophysical processes—rarely recedes as passive “context.” Home to uniquely diverse and rapidly transforming bio-physical systems, geopolitical encounters and indigenous relations of knowledge and practice, Nepal has long offered a wealth of opportunities to advance nuanced geographical understandings of the *co-production* of socio-natural relations and affords rich grounds for transformative politics and intersectional modes of resistance.

Geographers have played an important role in identifying and conceptualizing socio-natural relations in Nepal and the Himalaya. With a foot in both the social and physical sciences, geography as a field has been particularly well-suited to tackling such questions (see Marston 2008). Geographers’ embrace of diverse methodologies—from aerial photography and land use surveys, to participatory mapping and ethnography—has allowed them to identify gaps and discrepancies in data sets, challenge scientific objectivism, embrace uncertainty, and turn a critical analytical lens back on experts and institutions of scientific knowledge production (e.g., Blaikie 1985; Thompson and Warburton 1985; Ives and Messerli 2003; Nightingale 2003, 2005; Ojha 2006; Nightingale and Ojha 2013; see also Katz 1992; Nast 1994; Lawson 1995; Forsyth 2004; Robbins 2004). Consideration of multiple spatial and temporal scales has also enabled a relational approach to place and space—involving attention to how regions and localities are produced through intersecting, multi-scalar processes and

flows (e.g., Gurung 1969, 1984, 2005; Sharma 1989, 2001; Metz 1991; Adhikari 2001; Bhattarai 2003; Ghimire 2014; see also Massey 1991, 2004, 2012; Harvey 2012; Hart 2018). With this perspective, making sense of the relationship between a farmer and a field, for example, requires attention not only to immediate household dynamics and the local environment, but also to histories of state displacement, transnational trade, and the collision of tectonic plates over the course of millennia.

Insights from geographical research in Nepal have been influential in advancing understandings and debates about environmental governance and development in both regional and global arenas. While geography departments in Nepal have faced challenges due to limited resources, geographical scholarship has continued to grow and develop both within and beyond academic institutions in Nepal, building on the strong foundations laid by early geographical scholarship in the region and incorporating cutting edge technologies and novel approaches to critical social and physical science. Geographical approaches have played an important role in setting research agendas, deconstructing dominant narratives, informing policy approaches, and mobilizing politicized resistance in relation to a variety of important issues including: economic development (e.g., Gurung 1969, 1984, 2005; Blaikie, Cameron and Seddon 1977; Byers 1987; Shrestha 1995, 1997; Bhattarai 2003; Sharma 2005, 2007); agriculture and environmental degradation (e.g., Thompson and Warburton 1985; Karan and Iijima 1985; Metz 1989, 1991; Shrestha 1995, 1997; Ives and Messerli 2003; Nightingale 2003, 2005; Ojha 2006; Ojha *et al.* 2008; Adhikari 2008; Bhattarai 2011; Koirala 2017); population and migration (e.g., Shrestha 1985, 1989, 1990; Subedi 1991; Adhikari 2001); and natural hazards (e.g., Ghimire 2011, 2017; Devkota, Doberstein and Nepal 2016; Byers *et al.* 2017; Gergan 2017; Rajaure and Paudel 2018).¹ Our aim in the issue is to both take stock and look to the future of Nepal and Himalayan geography. The issue offers historical reflection, a snapshot of contemporary research, and discussions of how Himalayan perspectives can continue to further debates on questions that are of increasingly urgent global concern.

¹ The examples and citations provided here are, of course, only a small sample of extensive bodies of work. For detailed reviews of the history and scope of the discipline of geography in Nepal see Panday (1998); Subedi and Poudel (2005); Koirala (2008); Adhikari (2010); Subedi (2014); as well as Lewison and Murton, this issue.

This special issue of SINHAS emerges out of ongoing conversations within a Nepal and Himalayan geography community that has consolidated over five years in the wake of the 2015 earthquakes.² A moment of inspiration can be traced to the immediate earthquake aftermath in the summer of 2015, when some of the authors asked each other “where are the geographers, and what are they doing?” Troubled by a discrepancy between the potential application of geographic tools of analysis—from GIS and remote sensing to place-based critical analysis and attention to localized manifestations of geopolitics—and a dearth of relevant geographic scholarship in the months following the earthquakes, we subsequently convened semi-annual meetings of Nepal and Himalayan geographers at the Annual Meeting of the American Association of Geographers and the Annual Kathmandu Conference on Nepal and the Himalaya. Building on our previous question in the context of the earthquake emergency, members of the Nepal and Himalayan geography community began not only to articulate and document geographers’ responses to the earthquake, but also to reflect together on geography’s contributions to Nepali and Himalayan studies and to the interface between social and physical sciences more broadly.

In this special issue we focus on three key themes of interest across the sub-fields of geography that emerged as common ground during those meetings: sustainability, disaster and infrastructure. Each of these framings of socio-material relations represents a terrain of scholarly debate and political struggle. Sustainability, for example, appears to have emerged as *the* paradigmatic organizing framework of our time. However, the salience of the concept is made possible by fundamental ambiguities over what is to be sustained, for how long, and by and for whom (see Lewison and Murton; Paudel and Rankin). Approaches to disaster are similarly embedded in questions of whose disasters count and how to properly account for the layers of structural relations that produce the risks and vulnerabilities contributing to the *making of* “natural” disasters (see Gladfelter; Ghimire; Plachta). Infrastructure, meanwhile, has seen an explosive rise in popularity

² Throughout the special issue the authors refer to the seismic events of 2015 as “the 2015 earthquakes”—an expression which is intended to encompass both the initial April 25, 2015 earthquake and its significant aftershocks on May 12. Seismic events greater than 7.0 magnitude qualify as earthquakes, even if they are aftershocks of a previous event. Both the April 25 and May 12 seismic events in Nepal were greater than 7.0 in magnitude (see USGS 2015).

over the last decade—as both a re-emergent development paradigm and a subject of analysis. Infrastructure is deeply political—it cements (often literally) certain visions of development and relations of privilege and opportunity in place over extended periods of time. Analytical approaches focused on infrastructure aim to bring these foundational structures into the foreground and expose them to debate and contestation (see Lewison and Murton; Gladfelter).

Our aim here is to capture some of the diversity of Nepal and Himalayan geography's contributions to the study of sustainability, infrastructure and disaster. The articles range from broad surveys—of both a geographical region (Ghimire; Lal) and the terrain of geographical scholarship in Nepal (Lewison and Murton)—to intimate cases of communities (Gladfelter; Plachta), to polemical essay (Paudel and Rankin) and a tribute to a preeminent geographer of the region (Metz). The contributions offer a juxtaposition of the variety of methods employed to explore these themes, encompassing the layering of topographic, disaster risk and land use maps and quantitative surveys, to qualitative interviews and oral accounts, focus groups, archival and archaeological evidence, personal reflection, and ethnographic observation. The articles also capture some of the geographical diversity of Nepal itself, ranging from high mountain Himalayan borderlands where Nepal meets the Tibetan Autonomous Region, to the Siwalik Hills, to a major entrepôt city of the Tarai, and to the lower Karnali River Basin on the Nepal-India border.

A throughline that cuts across the articles in this special issue is critical attention to relations of power. The articles explore how uneven relations of power play out within the conceptualization as well as the political economy and ecology of sustainability, disaster and infrastructure. The contributions include, for example, attention to how histories of displacement and marginalization leave certain communities particularly vulnerable to floods and landslides and to how infrastructures like embankments and roads take shape through particular visions of development and the immediate interests of powerful actors. Authors also speak to the ways in which relations of power are reproduced and contested within the academic field of geography and in practices and ideologies of development more broadly.

Following this Introduction, the special issue is comprised of four articles and three commentaries. It begins with a broad survey of geographical contributions on Nepal and the Himalaya from the mid-twentieth century to

the present by Elsie Lewison and Galen Murton. The contribution aims to draw out several key features of geographical approaches to sustainability, infrastructure, and disaster in Nepal and to discuss how Nepal-based geographical work has contributed to broader debates on these themes within and beyond Nepal. It charts early influential contributions to the sustainability literature in relation to fears over rapid deforestation and soil erosion, debates over the role of road building in development, and the consolidation of literature on disaster, specifically in the wake of the 2015 earthquakes and recent extreme weather events likely linked to climate change. The contribution concludes with a reflection on structural power relations at work in the academic discipline of geography and argues that understanding the full scope of geographical contributions in Nepal requires looking beyond traditional academic spaces.

Motilal Ghimire offers an example of the robust geographical research programs underway at Tribhuvan University. The author builds on extensive research conducted over the course of his career to provide a geographical survey of an important, ecologically sensitive and relatively understudied region of Nepal—the Siwalik Hills. Ghimire employs an integrated cultural landscape analysis to furnish insights for better understanding questions of sustainability and risk in the region. The cultural landscape approach situates changing strategies of resource management and adaptation to the landscape within the context of broader geophysical and political-economic dynamics, demonstrating how risk and vulnerability have been historically produced, particularly for certain communities, through political interventions and demographic shifts playing out in a geologically unstable and ecologically sensitive region.

The next two articles focus on case studies in different geographical contexts in Nepal. Both cases speak to key themes raised in Ghimire's contribution including the socio-natural production of risk and vulnerability and the value of an integrated analysis attentive to both socio-cultural and biophysical relations. However, they draw on significantly different methodological approaches in addressing these themes. Sierra Gladfelter's article explores the construction of embankments by the Karnali River Training Project (KRTP) on Rajapur Island—an understudied region in Nepal's southwestern alluvial floodplain on the Indian border. The article adopts a political ecology approach to examine how floods have been *made* disasters for certain communities in the lower Karnali Basin through

processes of violent displacement and marginalization. Gladfelter further argues that the infrastructural solution to flooding offered by the KRTP exacerbates inequalities and unevenly distributes risk and protection. The contribution demonstrates how uneven benefits and losses accrue both in the process of constructing embankments and in their “aftermath,” as infrastructural failures and side effects create new, everyday disasters for those who live most intimately with the river and the infrastructure intended to discipline and contain it.

Nadine Plachta offers a case study of the experiences of Himalayan communities living in Lapchi Village of Dolakha district in the aftermath of the 2015 earthquakes. The article similarly points to the production of vulnerability and marginalization in the decades prior to the earthquakes, as the community dealt with the shifting character and geography of Nepal’s border with the People’s Republic of China and evolving socio-spatial politics across the Tibetan Autonomous Region. Plachta also, however, demonstrates how the Lapchi community actively negotiated their ambiguous positionalities of citizenship and belonging in the post-earthquake context to gain access to disaster relief. The article demonstrates the importance of geographic perspectives for the emerging field of borderland studies (in which Nepal scholarship features centrally) as well as anthropologies of disaster, by illustrating how geographical marginalization and strategic mobilizations of citizenship and belonging play into the *making* of disasters and their aftermaths.

CK Lal’s commentary on Birganj takes a step back to provide historical perspective on the development of the city. The author tells an important story of an under-examined but prominent city with an explicit Madhesh identity, within the context of an overall argument about the political economic and geographic basis for urban primacy. The historical evolution (and domination) of Birganj is thus presented in relation to the wider field of Tarai/Madhesh cities and Hindu monarchy. Floods are revealed as powerful agents in this history. Infrastructure also makes important appearances as the city ebbs and flows with investments in railways, the *hulāki* road, highways and truck manufacturing. Thus the story of Birganj accounts for millennia of socio-natural relations that routinely shape attempts by rulers to forge cities under their name and patronage. At the same time, when the account turns to the future, it makes a compelling and hopeful argument about how planners (and a newly energized youth political constituency) can work to realize

the legacy of Birganj’s urban primacy, to provide the social and “creative” infrastructures necessary to support the city’s role as a transportation and communication hub.

In the second commentary, Paudel and Rankin build on the contributions to the special issue to advance (and complicate) longstanding calls for epistemic decolonization of studies in Nepali history and society. To do so they engage historical-materialist approaches framed within core geographic concepts of relationality and spatiality. The authors suggest an agenda for decolonizing development in Nepal and Himalayan geographies that builds on the practices and possibilities of relational autonomy—a principle premised on a relational orientation to the politics of place that furnishes “practical tactics for taking control over the terms on which a place is connected to other localities and wider political economies” (Paudel and Rankin).

John Metz’s concluding contribution provides further reflection on historical trajectories of Nepal and Himalayan geography through a tribute to an iconic geographer of the Himalaya, Pradyumna Prasad (Paul) Karan. Metz situates Karan’s remarkable academic career—which encompassed the study of regions ranging from the Himalayas, to Japan, to Kentucky (US)—in an equally remarkable personal biography. Karan’s work on socio-environmental landscapes played an important role in advancing debates discussed by Lewison and Murton and the cultural landscape approach that Ghimire employs. Metz also highlights the deep-seated racism that Karan faced both in the institutions and scholarship of geography. His experiences speak to a recent past that remains present in the foundations (or infrastructures) of the discipline today.

This special issue is headed for publication at a moment when the social and biophysical *co-production* of environments is visible in ways that are historically unprecedented. As Kregg Hetherington (2019: 2) puts it, “[T]he environmental objects that define our age, such as carbon emissions and algae blooms [and, for that matter, COVID-19], are neither human nor nonhuman, neither fully outside of us, nor fully inside.” The ever increasing entanglement of social and “natural” biophysical processes demands new ways of thinking about questions of sustainability, disaster and infrastructure. If sustainability is often conceptualized as social processes that proceed without fundamental disruption of the biophysical processes on which they depend, how should we conceive of sustainability when the dividing lines

between social and biophysical worlds are no longer meaningful? How should we rethink disasters in light of uneven geographies of the production of risk and vulnerability at a global scale? And what, as Hetherington (2019) points out, does it mean for the study of infrastructure when globalized infrastructures of production and consumption are producing the very environments in which they are built?

There is a long and deep history of exploring such lines of questioning in Nepal and the Himalaya. Geographers in particular have brought a versatile toolkit of methodological and analytical approaches to their research that have enabled movement and dialogue across social and physical sciences and produced nuanced accounts of how regions and places are produced through the articulation of multi-scalar processes and flows. Nepal and Himalayan geographies continue to propel research agendas and advance broader understandings of sustainability, disaster and infrastructure. At the same time, the scholarly community also continues to grapple with the uneven geographies of power and privilege, and ever-present pasts, within the field today. In this special issue, we aim to provide a window into this rich world of inquiry, critical reflexivity and political possibility to demonstrate why Nepal and Himalayan geographies matter more now than ever.

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