



RELIGION AND CLIMATE CHANGE IN CROSS-REGIONAL PERSPECTIVE:

Mountains and Implications of Glacial Melt in the Himalaya and Andes

Co-sponsored by American University's Center for Latin American & Latino Studies (CLALS) and the Universidad Antonio Ruiz de Montoya, with support from the Henry Luce Foundation

Lima, Peru; May 2-3, 2017





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WORKSHOP BASIC INFORMATION

WEATHER: By May Lima is covered in a blanket of clouds, mist and fog. On many winter days morning and evening drizzle, locally called *garúa*, is a common occurrence. Temperatures in winter reach around $17^{\circ}C/62^{\circ}F$ by day and $11^{\circ}C/52^{\circ}F$ by night. But please don't let yourself be fooled by these quite moderate numbers. There is always a difference between the real and the felt temperatures. Grey sky for weeks, high humidity, no heating in most buildings and once in a while drizzle makes winter in Lima at least for Limeños, a quite clammy and cool experience. We advise one pack a nice, warm sweater and a pair of thick socks.

CURRENCY: Peru's currency is the Nuevo Sol, and its value in relation to the U.S. Dollar tends to fluctuate quite a bit. Automated teller machines (ATMs) are the best way of getting cash in Peru; they're found in most towns and cities, although not on every street corner. ATMs allow customers to withdraw money in either Peruvian soles or U.S. dollars. Screen instructions are in English as well as Spanish. Some bank ATMs dispense money only to those who hold accounts there. Visa and MasterCard ATM cards are the most widely accepted. Always opt for a machine inside a bank or airport.

Credit cards are accepted in most hotels and up market shops, but are generally used less than in western countries. For purchases of snacks, drinks, meals and small items, it is always best to use cash. Should you use a credit card in Peru, it is usual to pay a local commission of 5 percent.

GETTING FROM THE AIRPORT TO THE HOTEL: In-Airport Authorized Taxi Service

The best way to get from the airport to your hotel is to take a taxi. There are three official taxi services registered through the airport:

- Taxi CMV (Taxi Remisse Ejecutivo)
- Taxi Mitsu Remisse
- Taxi Green

The vehicles they use are new, clean and comfortable, and they all use flat-rate fares (metered taxis are non-existent in Peru). Expect to pay around S/.50 (US\$17) for a ride to Miraflores or San Isidro from the airport. If you need a van (either because you have more than three passengers or because of oversized luggage), rates are about S/.20 (US\$7) higher.

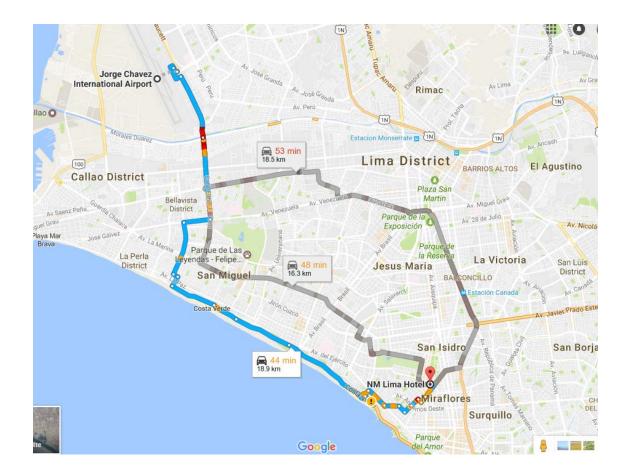




Note: There is also a shuttle service available through the hotel. But this must be arranged in advance. Please contact CLALS's operations manager, Ines Luengo de Krom (<u>luengode@american.edu</u>) should you wish to arrange this service.

Tips:

- Have Peruvian soles in hand (don't fret if you don't most taxis will accept U.S. Dollars, Euros or Pounds).
- Write down the name of your hotel, its address and the phone number so your driver can find it.
- Tipping your driver is not mandatory, however, if you are feeling especially generous, a S/.5 *propina* will be welcomed.







ACCOMMODATION: Workshop participants coming from out of town will be at the NM Lima Hotel. Your reservation has been made, and you should not be asked to pay for anything except incidental expenses (e.g. telephone charges, mini bar or laundry). From Jorge Chavez International Airport, give the taxi driver the following address:

The NM Lima Hotel Av. Pardo y Aliaga 330, San Isidro 15073, Peru Tel. (511) 612-1000

Further information about the hotel can be found here: <u>http://www.nmlimahotel.com/</u>

MEETING DATES AND VENUE: This two-day workshop will take place at the Universidad Antonio Ruiz de Montoya, which is a 30-minute drive from your hotel, The NM Lima Hotel. We have arranged for transport to take you to and from the hotel and meeting venue, and will let you know when to rendezvous in the hotel lobby to go to the workshop.

Venue: Universidad Antonio Ruiz de Montoya

Universidad Antonio Ruiz de Montoya, J.J. Paso, Pueblo Libre 15084, Peru Phone no.: <u>+91 11 23520020</u>

Workshop Schedule:

May 2nd: 9:30 a.m. – 4:45 p.m. (first day of workshop) Evening of May 2nd: 7:00 p.m. – 9:30 p.m. (dinner for workshop participants) May 3rd: 10:00 a.m. – 2:00 p.m. (second day of workshop) Afternoon of May 3rd: 4:00pm – 6:00 p.m. (public forum)

RECEIPTS AND BOARDING PASSES: In order for you to be reimbursed, please save all boarding passes and receipts, both from the trip to Lima and the return trip home. We will provide you with reimbursement forms. Original or scanned versions of all receipts and boarding passes are required to promptly and efficiently process reimbursements.

In the event that you need to reach the workshop organizers for any reason, including emergencies, please contact: Jorge O. Elgegren (51-1-7195990 Anexo 141), jorge.elgegren@uarm.pe; Robert Albro (703-459-3163), robert.d.albro@gmail.com; or Ines Luengo de Krom (202-885-6178), luengode@american.edu.





RELIGION AND CLIMATE CHANGE IN CROSS-REGIONAL PERSPECTIVE: Mountains and Implications of Glacial Melt in the Himalaya and Andes

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WORKSHOP AGENDA

Day 1: Tuesday, May 2nd

9:30am-10:00am Arrival and Registration

Location: Universidad Antonio Ruiz de Montoya

10:00am-11:15am Welcome

Birgit Weiler, Jorge O. Elgegren (Universidad Antonio Ruiz de Montoya)

Eric Hershberg, Robert Albro, and Evan Berry (American University)

11:15am-11:30am Tea/Coffee break

11:30am-1:00pm Panel Discussion 1: Pilgrimage, Ritual Practice, and Responses to Climate-Induced Events and Change

Moderator: Evan Berry (American University)

Panelists:

Guillermo Salas Carreño (Pontificia Universidad Catolica del Peru) Topic: A shrinking glacier and changing ritual practice in the Qoyurriti pilgrimage

David Haberman (Indiana University) Topic: Effects of climate-induced disasters on the Char Dham Yatra pilgrimage, India





Teófilo Altamirano (Pontificia Universidad Católica del Peru) Topic: Symbolic and ritual responses of pilgrims to glacial retreat on Huaytapallana

Discussant:

Javier Arellano-Yanguas (Universidad de Deusto)

1:00pm-2:30pm Lunch

2:30pm-4:00pm Panel Discussion 2: Indigenous/Local World Views and Perceptions of Change and of Climate

Moderator: Jorge O. Elgegren (Universidad Antonio Ruiz de Montoya)

Panelists:

Karine Gagné (Yale University) Topic: Ritual revival and glacier-related religious practice in Ladakh, India

Sebastien Boillat (University of Bern) Topic: Climate and indigenous interpretations of change in the rural Bolivian Andes

Neeraj Vedwan (Montclair State University) Topic: Local knowledge and responses to climate change among apple growers in India's Kullu valley

Discussant:

Susan Crate (George Mason University)

4:00pm-4:15pm Tea/Coffee Break

4:15pm-4:45pm Preliminary Observations and Conclusions

Moderator: Eric Hershberg (American University)





6:30pm-7:00pm Transport to Dinner

7:00pm-9:30pm Dinner

Location TBD

Day 2: Wednesday, May 3rd

10:00am-11:30am Panel Discussion 3: Sacred Landscapes, States and Other Regimes of Power/Knowledge

Moderator: Robert Albro (American University)

Panelists:

Mabel Gergan (University of North Carolina) Topic: Sacred landscapes, hydropower and anti-dam activism in Sikkim, India

Fausto Sarmiento (University of Georgia) Topic: Sacred landscapes, ethno-tourism and the biocultural in Ecuador's Imbakucha watershed

Emily Yeh (Colorado University, Boulder) Topic: The cultural politics of climate change and sacred landscapes in Tibet

Discussant:

Birgit Weiler (Universidad Antonio Ruiz de Montoya)

11:30am-11:45am Tea/Coffee Break

11:45am-12:45pm Conclusions and Next Steps

Moderator: Evan Berry (American University)





12:45pm-1:00pm Closing Remarks and Thanks

Birgit Weiler (Universidad Antonio Ruiz de Montoya)

Eric Hershberg (American University)

1:00pm-2:00pm Lunch

Workshop adjourns

4:00pm-6:00pm Public Forum: Latin America's Contributions to Current Global Climate Diplomacy

Location: Universidad Antonio Ruiz de Montoya, Auditorium (Note: in Spanish)





PUBLIC FORUM

Latin America's Contributions to Current Global Climate Diplomacy

Wednesday, May 3 4:00pm – 5:00pm Universidad Antonio Ruiz de Montoya Auditorio Vicente Santuc, SJ Av. Paso de los Andes 970, Pueblo Libre

This forum, hosted by the Universidad Antonio Ruiz de Montoya, complements and concludes a two-day workshop on "Religion and Climate Change in Cross-Regional Comparison," cosponsored by UARM and American University's Center for Latin American & Latino Studies (Washington, DC). Note: This forum will be conducted in Spanish.

Event description: As a region, Latin America has had a prominent place in global discussion and debate about environmental sustainability and climate change. In the past, the Amazon, often called the "lungs of the world," has perhaps more than anywhere else served as the point of departure in Latin America for any discussion of the environment's future. But, in recent years the Andean region has also become increasingly important in global and multilateral discussions and diplomacy around climate change, particularly as Andean tropical glaciers have come to be an important bell weather for the early effects of climate change. In 2007 Ecuador made headlines by launching the Yasuni-ITT initiative, pledging to leave oil in the ground, as part of a bid to develop new forms of international cooperation to limit greenhouse gas emissions. In response to the failures of international cooperation to adequately confront the threat of climate change, beginning in 2010 Bolivia organized a series of alternative climate summits, which have successfully generated new approaches and ideas, some of which have since been incorporated into the UN climate framework. Finally, Peru hosted the COP-20 meeting in 2014, as part of the UNFCCC process and as an important lead-up to the historic 2015 Paris Agreement on climate change. This public forum will consider the role of Latin America in global climate change diplomacy, including the impact of Pope Francis's influential encyclical on the environment, Ladauto si, and with particular attention to recent contributions from the Andes.

This panel will feature: Ms. Rosa Morales, General Director of Climate Change, Desertification, and Water Resources in Peru's Ministry of the Environment; Dr. Birgit Weiler, Director of Research, Universidad Antonio Ruiz de Montoya; Prof. Fausto O. Sarmiento, Department of Geography, University of Georgia; Prof. Teófilo Altamirano, Center for Research on Sociology, Economics, Politics and Anthropology, Pontificia Universidad Católica del Perú.





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WORKSHOP PARTICIPANTS

Robert Albro is Research Associate Professor at American University's Center for Latin American & Latino Studies. He received his PhD in Sociocultural Anthropology from the University of Chicago, and has conducted ethnographic research and published widely on popular and indigenous politics along Bolivia's urban periphery, including resource wars over water and extractive resources. Much of this work is presented in his book, *Roosters at Midnight: Indigenous Signs and Stigma in Local Bolivian Politics* (SAR Press, 2010). Dr. Albro's research and writing have been supported by the National Science Foundation, Mellon and Rockefeller foundations, and the American Council for Learned Societies, among others. He has been a Fulbright scholar, and held fellowships at the Carnegie Council, Kluge Center of the Library of Congress, and Smithsonian Institution. Dr. Albro currently serves as co-PI on the Henry Luce Foundation-funded project, "Religion and Climate Change in Cross-Regional Perspective." Email: robert.d.albro@gmail.com

Teófilo Altamirano is trained as a Cultural Anthropologist and a Researcher in the Center for Research in Sociology, Economics, Politics, and Anthropology at the Pontificia Universidad Católica del Perú. He was also recently a Tinker Research Fellow at the University of Texas-Austin. Dr. Altamirano's work is concerned with the effects of climate change and glacial retreat in the central Peruvian Andes, including water stress, displacement, resulting social conflicts, adaptation, and resilience. Much of this work can be found in his recent book, *Refugiados ambientales: cambio climático y migración forzada* (2014). He has also worked on topics relating to environmental hazards and urban anthropology. Email: <u>taltami@pucp.edu.pe</u>

Javier Arellano-Yanguas is a Researcher and Director of the Centre for Applied Ethics at the University of Deusto (Spain). He holds a PhD in Development Studies from the Institute of Development Studies at the University of Sussex. Dr. Arellano-Yanguas has notable experience in NGO environments, including as the Founder and Director of ALEOAN, an NGO dedicated to international cooperation and currently operating in 12 countries. With a focus on Peru, over the years, he has written extensively on such topics as religion, the extractive economy and dilemma of the resource curse. He has also published widely, producing eight books, including ¿Minería sin fronteras? Conflicto y desarrollo en regiones mineras de Perú (2011). Email: javier.arellano@deusto.es

Evan Berry is Associate Professor of Philosophy and Religion at American University and Co-Director of the Ethics, Peace, and Global Affairs master's program. He received his PhD in Religious Studies from the University of California, Santa Barbara. His research examines the intersections among religion,





globalization, and climate change, and seeks to advance knowledge about the role of religious actors in contemporary environmental contestations. His recent book, *Devoted to Nature: The Religious Roots of American Environmentalism* (University of California Press, 2015) explores the religious sources of the environmental imagination in the United States. His current work combines ethnographic research with philosophical reflection to address the study of religious civil society groups actively engaged with the challenge of climate change. He currently serves as Principal Investigator on the Henry Luce Foundation funded project, "Religion and Climate Change in Cross-Regional Perspective." Email: berry@american.edu

Sébastien Boillat is a Post-Doctoral Researcher at the Institute of Geography of the University of Bern. He has a PhD in Human Geography from the University of Bern and a MSc in Environmental Science from the Swiss Federal Institute of Technology in Zurich. His fields of research include the governance of natural resources, land system science, political ecology, ethnobiology, sustainable development, sustainable land management and vegetation ecology, with focus on developing countries. Boillat has worked in Bolivia, Switzerland, Brazil, Canada, Cuba, Laos and Kenya. He has eight years of field research experience in Bolivia, and was the co-coordinator of a SNIS research project on "mapping land governance" in Bolivia and Laos. He also filled the position of Executive Officer of the Global Land Programme, then based at the Brazilian Space Research Institute. Finally, he has worked with the Swiss Agency for Development and Cooperation in Switzerland and in Cuba. Email: <u>sebastien.boillat@giub.unibe.ch</u>

Susan Crate is Professor of Anthropology in the Department of Environmental Science and Policy at George Mason University. She received her PhD in Ecology in 2002 from the University of North Carolina at Chapel Hill. As an applied social scientist trained in cultural anthropology and human ecology, she focuses on issues of human-environment interactions. Since 1988, she has conducted research in Siberia, with an increasing focus on collaborations across the eight circumpolar countries. Her current research focuses on understanding local perceptions, adaptations, and resilience of Viliui Sakha communities in the face of unprecedented climate change. Crate is the author of numerous peer-reviewed articles, one monograph, *Cows, Kin and Globalization: An Ethnography of Sustainability* (Alta Mira Press, 2006), and senior editor of the 2009 volume, *Anthropology and Climate Change: From Encounters to Actions* (Left Coast Press). Email: scrate1@gmu.edu

Jorge O. Elgegren is Director of the Professional School Environmental Economics and Management at the Universidad Antonio Ruiz de Montoya. He is an economist, with a Bachelors' degree from the Catholic University of Perú (PUCP), an M.A. in Amazonian Studies from the Latin American Social Sciences Faculty (FLACSO), and an MSc in Environmental and Resource Economics from University College London (UCL). He has taught at PUCP, the National Agrarian University "La Molina," and the National University of Engineering. Prof. Elgegren has also served as Deputy Representative for the Food and Agriculture Organization of the United Nations (FAO) and a Forestry and Biodiversity Senior Officer for USAID. He has consulted widely for diverse agencies within the UN system, as well as other organizations of international cooperation, including the World Bank and the German Federal Enterprise for International Cooperation. Email: jorge.elgegren@uarm.pe





Karine Gagné is a Postdoctoral Associate in the Department of Anthropology at Yale University. She holds a PhD in Anthropology from the University of Montreal (2015), and has been a Visiting Scholar at the School of International and Public Affairs at Columbia University. She is currently sponsored by a Banting Postdoctoral Fellowship from the Social Sciences and Humanities Research Council of Canada. Karine's work examines the intersection between the material environment, embodied knowledge and environmental ethics. In particular, her research focuses on the reciprocity between practice and worldview and how both state interventions and climate change alter these processes, and her further interests include questions related to temporality, movements, human-animal relations, Buddhism and everyday life and moral ambiguity. Her research is based in North India and the Himalayas. Email: karine.gagne@yale.edu

Mabel Gergan is currently a Post-Doctoral Fellow in the Department of Geography at the University of North Carolina-Chapel Hill, where she also received her PhD in 2016, titled "Precarity and Possibility at the Margins: Hazards, Infrastructure, and Indigenous Politics in Sikkim, India." Her research and teaching interests encompass postcolonial studies, materialist geographies, cultural anthropology, and youth geographies. She uses these several frameworks to examine the shifting relationship between the Indian State and its Himalayan margins, including addressing such topics as activism, the sacred, responses to environmental events, migration, and indigenous identity in Sikkim. Email: <u>mgergan@email.unc.edu</u>

David Haberman is a Professor in the Department of Religious Studies at Indiana University, and received his PhD from University of Chicago. Dr. Haberman's research and writing have been concerned with: the history of South Asian religions, theories of religion, religion and ecology, as well as ritual and Indian arts and aesthetics. He has published six books, including most recently People Trees: Worship of Trees in Northern India. (Oxford University Press, 2013) and River of Love in an Age of Pollution: The Yamuna River of Northern India (University of California Press, 2006), a study of the identification of the Yamuna River as an aquatic goddess, how the pollution of the river is affecting its religious culture, and the ways in which the religious community associated with the river is marshalling its resources to fight the river's pollution. Over the years, Dr. Haberman has been a recipient of Guggenheim and Fulbright fellowships, among other awards. Email: dhaberma@indiana.edu

Eric Hershberg is Director of the Center for Latin American & Latino Studies and Professor of Government at American University. He received his PhD in Political Science from the University of Wisconsin-Madison. His most recent publications include two co-edited volumes, one with Maxwell A. Cameron, entitled *Latin American Left Turns: Politics, Policies, and Trajectories of Change* (Lynne Rienner, 2010) and the second, *New Institutions for Participatory Democracy in Latin America: Voice and Consequence* (Palgrave Macmillan, 2012), with Maxwell A. Cameron and Kenneth E. Sharpe. Dr. Hershberg has taught at New York University, Southern Illinois University, Columbia, Princeton, and The New School. He also served for fifteen years as a Program Director at the Social Science Research Council in New York City. He currently also serves as co-PI on the Henry Luce Foundation-funded project, "Religion and Climate Change in Cross-Regional Perspective." Email: <u>hershber@american.edu</u>





Karsten Paerregaard is Professor of Anthropology in the School of Global Studies at the University of Gothenburg, Sweden. He received his PhD in Anthropology from the University of Copenhagen. Dr. Paerregaard's long-term research has focused on rural-urban migration and transnational migration in Peru. His current research is concerned with the effects of climate change on Peru's rural and urban populations, including how growing water scarcity is leading to new conflicts, and the local, regional, and national responses to these conflicts. Dr. Paerregaard's work also explores the development of new strategies and alliances to adapt to the changing environment. Plans for future research include work on a comparative anthropology of adaption and mobility of mountain peoples to climate change. Email: karsten.paerregaard@globalstudies.gu.se

Jorge Recharte is the Andes Program Director for The Mountain Institute (TMI), based in Huaraz and Lima, Peru. He holds a PhD in Anthropology from Cornell University. Prior to joining the TMI in 1997, Dr. Recharte worked in Ecuador for the Latin American Social Science Institute (FLACSO), where he designed and led the graduate education and research program in Mountain Societies and Sustainable Development. Dr. Recharte has conducted research and worked to draw attention to the dramatic effects of climate change-induced glacial melt on the welfare of mountain communities and the Andean region, and has organized climate change adaptation projects for mountain ecosystems, in the process fostering cooperation between scientists, mountain communities and local governments to find solutions for large watersheds and reduce the risk of glacial lake flooding. Email: jrecharte@mountain.org

Guillermo Salas Carreño is a Professor in the Social Sciences Department of the Pontificia Universidad Católica del Perú, where he teaches Anthropology. He holds a PhD in Anthropology from the University of Michigan, and an M.A. in the Social Sciences from the University of Chicago. Dr. Salas Carreño's work addresses the following topics: the articulation of narratives of modernity, regionalism, and racialethnic ideologies of difference; the effects of the extractive economy on rural society; indigenous practices and relationships with the environment, with particular attention to commensality, pilgrimage, and devotional dance. He is currently coordinating a project analyzing how Andean communal practices attribute agency and intentionality to mountains, in contexts of the emergence and transformation of conflicts between local communities and mining projects. Email: <u>guillermo.salas@pucp.pe</u>

Fausto O. Sarmiento is a Professor in the Department of Geography at the University of Georgia, where he also received his PhD. Prof. Sarmiento's research interests are varied and include: the human dimension of global change in the Andes; tropical geoecology theory and human drivers of landscape change; cultural landscapes, resource management, sacred sites and sustainable development; restoration ecology, farmscape transformation and sustainability; and museology and international education. He is the co-editor of the *International Handbook of Geography and Sustainability*. And in addition to many peer-reviewed articles and book chapters, Prof. Sarmiento has edited or authored seven academic books, including most recently *Indigenous Revival and Sacred Sites Conservation in the Americas* (Berghahn, in press), as well as seven textbooks. Email: fsarmien@uga.edu

Neeraj Vedwan is an Associate Professor of Anthropology at Montclair State University. He received his PhD from the University of Georgia, and his B.A. from the National Dairy Research Institute (India). His academic field of expertise falls broadly in the area of environmental anthropology, but also includes such topics as social media. More specifically, his research is concerned with water resources management,





environmental perceptions and activism, and the linkages between consumerism and environmental values and behavior, including local perceptions of climate change among apple growers in Northwest India. Email: <u>vedwann@mail.montclair.edu</u>

Birgit Weiler is currently Director of Research and Incidence at the Universidad Antonio Ruiz de Montoya, responsible for catalyzing and promoting new knowledge production throughout the university. She holds a PhD in Theology and Creation Care from the University of Frankfurt (Germany). Her scholarship addresses such topics as: theology, faith, ecology, religion, bioethics, and sustainability She is also the author of *Mensch und Natur in der Kosmosvision der Aguaruna und Huambisa und in den christlichen Schöpfungsaussagen* (2011), which describes engagements of indigenous Amazonian cosmologies with the Christian creation story. Email: birgit.weiler@uarm.pe

Emily Yeh is Professor and Chair of the Department of Geography at the University of Colorado-Boulder. My main research interests are on questions of power, political economy, and cultural politics in the nature-society relationship. Using primarily ethnographic methods, I have conducted research on property rights, natural resource conflicts, environmental history, development and landscape transformation, grassland management and environmental policies, and emerging environmentalisms in Tibetan areas of China. In addition, I have also worked on the politics of identity and race in the Tibetan diaspora, and on several NSF-funded interdisciplinary, collaborative projects on putative causes of rangeland degradation and vulnerability to climate change on the Tibetan Plateau. Broader research and teaching interests include transnational conservation, critical development studies, the relationship between nature, territory, and the nation, and environmental justice. My regional expertise is in China, Tibet, and the Himalayas. Email: <u>emily.yeh@colorado.edu</u>





APPENDIX 1: PROJECT SUMMARY

RELIGION AND CLIMATE CHANGE IN CROSS-REGIONAL PERSPECTIVE: Mountains and Implications of Glacial Melt in the Himalaya and Andes

We are excited to be partnering with the Observer Research Foundation, a leading Indian think tank and research center, as both co-sponsor and host for this workshop in New Delhi. OSF is particularly well-suited to this role, with multiple program areas of relevance, including on: climate, energy and resources; climate change and growth; ecology and resource management; and climate food, and environment, among others.

This workshop convenes researchers from India, Latin America, the US, and elsewhere, to focus on religious/cultural dimensions in the response and adaptation to emerging water-related challenges made worse by climate change. This encompasses glacial melt and river health, emerging agricultural challenges, connections between climate change and the increase of rural-to-urban migration, and stresses upon urban water systems in the global South, including water conservation and wastewater management, among other possible topics, for which India offers important material for study.

From the low-lying islands of the Caribbean to the glacial regions of the Himalayas, climate change is altering the physical environment and affecting human livelihood in ways that elicit religious response. In every corner of the planet, religions are influencing how individuals and communities understand earthly problems and develop meaningful responses to them. The world that religions seek to illuminate, furthermore, appears to have entered a new geological age, often labeled the anthropocene, in which human activity is recognized to be the primary driver of environmental change. The effects of this epochal transformation are actively reshaping religious ideas and practices, even as religious groups and communities endeavor to bring their traditions to bear on mounting climate challenges. Religion is a dynamic cultural factor through which societies attend to environmental challenges. At the same time, climate change may also act as a powerful driver of religious transformation.

This two-year project seeks to deepen our understanding of the relationship between religion and climate change across multiple regions of the world. It builds upon a previous research project focused on forms of religious engagement with environmental conflict in contemporary Latin American democracies. The present project advances previous work by incorporating a comparative perspective across regions and religions beyond just Latin America, in order to enhance understanding of religious responses to the transboundary effects of climate change. In so doing this project focuses on the interactions between transnational religious influences and local cultural contexts, and the ways religion mediates the global and the local, as a source for the varieties of religious response to the planet-wide challenges of climate change.





We plan to give three distinct if interrelated levels of analysis particular attention: 1) the role of religion as a key part of ongoing public discourse on climate change; 2) specifically religious sources of environmental knowledge, as this knowledge informs community responses to climate change; 3) and the ways that climate change is also driving religious change. In turn, these comparisons across regions and religions will focus on three features of climate change: the effects of glacial melt in the Andes and Himalayas, the vulnerabilities of small island archipelagoes in the Caribbean and South Pacific, climate-related stress upon urban water systems in South America and South Asia. The shared focus of regional comparisons on understandings of climate change through the lens of water-related crises enables exploration of the ways different religions engage with a broadly similar set of concerns while also foregrounding the interrelated effects of climate change.

Moving beyond a previous focus on Latin America, this research project seeks to describe the range of religious responses to climate change comparatively across regions and religions, and at different scales. Of particular concern will be analysis of similarities and differences in the exercise of religious agency to mediate the relationship between the global and the local. Religion, both as a type of social institution and as a resource for cultural norms, is a key nexus of globalization. It is an arena within which global challenges are locally instantiated, and within which local concerns seek international attention. The selection of particular cases across regional comparative frames will be guided by the following understanding of our three interrelated levels of analysis:

1) Public religion and climate politics

This area of inquiry focuses upon the responses of religious institutions and organizations to climate change, such as the recent papal encyclical, including their active involvement in international and national climate change politics and policy. Our approach will be comparative across regions and religious traditions and adopts a broad appreciation of religion encompassing world-historical religions like Christianity, Hinduism and Islam but also indigenous cosmologies. The comparative frame we employ answers the call for empirically robust analyses of religion that capture the markedly different ways that religion operates in the political economy of contemporary nations. We will also be attentive to the diversity of religious responses and their impacts, ranging from religious advocacy for carbon mitigation and climate adaptation to theologically motivated obstructionism and climate skepticism.

2) Religious sources of environmental knowledge

Building on previous efforts to document how religion shapes conceptions of the natural world and the position of human beings within it, the proposed project identifies a second priority area focused on the religious frames through which different societies come to grips with climate change. Global discourse about climate change generally invokes thin, broadly applicable value claims, but seldom grounds these in the cultural contexts and moral reasoning of the particular communities affected by climate change. In contrast to the utilitarianism typifying international discourse, societies understand and respond to changing environmental conditions according to a diverse array of ideas, practices, values and moral positions about nature. Problems of climate change are not understood in the same ways across cultural and geographic frontiers and communities. With attention to the movement between the global





and the local, this component of the proposed project seeks to trace the ways that religion informs moral, cultural and political positions relating to the challenges of climate change in communities across different regions.

3) Climate change as religious change

Religions are not static. They are not fixed and immutable sources of morality that reactively respond to the changing features of the modern world. Instead, religions are dynamic and evolve together with the world they inhabit. Religious institutions are beginning to address the ways that climate change is affecting how they go about their work, in the process actively re-evaluating some theological positions and developing new kinds of social and spiritual practices attentive to the realities of environmental change. Our work in this third priority area seeks to contribute to a newly emerging frontier of research on the role of religion in international affairs, selecting cases that bring to the fore the implications of climate change for the transformation of contemporary religious life.

Core Objectives

This project seeks to deepen our comparative regional understanding of the relationships between religion and climate change. We pay particular attention to interactions between different religious traditions and organizations, on the one hand, with national and municipal governments, civil society actors, advocacy networks, and local communities, on the other. With this project we are concerned with identifying similarities and differences in religious engagement across regions, and at three distinct levels of analysis, as a basis for constructively addressing climate change as a growing transboundary and planetary crisis. This includes sustained attention to the following:

- Systematic cross-regional comparisons of the relationship between religious belief, practices, and groups, and state or community actions regarding climate change.
- An improved appreciation of differences in the scale of religious engagements with climate change, including at international, regional, national, and local levels.
- A detailed understanding of the various ways religion mediates the relationship of the global to the local in the production of responses to climate change.
- Particular attention to: i. the role of religion as a key part of ongoing public discourse on climate change; ii. Specifically religious sources of environmental knowledge, as this knowledge informs community responses to climate change; iii. The ways that various features of climate change also drive religious change.
- Comparisons across regions focused on specific features of climate change, initially including: i. the effects of glacial melt in the Andes and Himalayas, ii. The vulnerabilities of small island archipelagoes in the Caribbean and South Pacific, iii. And climate-related stress upon urban water systems in South America and South Asia.





APPENDIX 2: ABSTRACTS OF WORKSHOP PRESENTATIONS

RELIGION AND CLIMATE CHANGE IN CROSS-REGIONAL PERSPECTIVE: Mountains and Implications of Glacial Melt in the Himalaya and Andes

Local and Regional Religious Responses to the Haytapallana Glacier Melt in the Central Peruvian Andes

Teófilo Altamirano (Center for Research on Sociology, Economics, Politics and Anthropology, Pontificia Universidad Católica del Perú)

Since the Inca period, the Hauytapallana glacier has been a focus of regional and local religious attention. Twenty years ago, glacier retreat became apparent to the surrounding population, who interpreted the cause of glacial retreat as a lack of respect shown toward the sacred mountain. There are currently two annual pilgrimages to the mountain: on July 25th, to celebrate the Catholic saint, Santiago, protector of domestic animals; and on June 21st, in recognition of the Andean new year. Recently both religious ceremonies have taken on an ecological dimension in opposition to the causes of glacier retreat at Huaytapallana, which also provides fresh water to a large population, including indigenous and non-indigenous agriculturalists, peri-urban and urban populations.

Protective Mountains and Angry Lakes: Sense of Place and Narratives of Global Change in the Rural Bolivian Andes

Sébastien Boillat (Institute of Geography, University of Bern, Switzerland)

This presentation examines narratives about the meaning of change found among rural farming communities of the Bolivian Andes. While farmers make pertinent observations of climate change, they often associate their observations with broader aspects of social and environmental change, including religious or spiritual explanations. Though, in climatic, social and economic terms, global change is clearly visible in Andean farmer communities, elements of continuity in local interpretations of weather, climate, ecological interactions, and their change, can be traced to historical accounts, and demonstrate the resilience of indigenous knowledge systems. In this presentation I focus in particular on sacred natural sites, as features in the landscape which are often associated with such narratives. I consider how the concept of "Pachamama" ("Mother Earth") is interpreted in farming communities and in public discourse. I go on to define some key features of indigenous interpretations of change, and possible implications for adaptation to change in the Andean region and elsewhere.





Pilgrim's Measures Regarding Glacial Retreat at the Quyllurit'i Pilgrimage (Cuzco, Peru)

Guillermo Salas Carreño (Social Sciences Department, Pontificia Universidad Católica del Perú)

The shrine of the Señor de Quyllurit'i ("Shining Snow") is located at the bottom of the Qulqipunku glacier, seventy kilometers east of the city of Cuzco. Mountains and glaciers like this one, ranked by altitude, are considered sentient beings and are addressed with the honorific *apu* (lord). In this presentation I first explain how the practices carried out by pilgrims relate the image of Christ with the glacier, and the relevance of this association for the pilgrimage event. I go on to explain the organizational structure of the pilgrimage and how it relates to the glacier. I focus primarily on the role of the Consejo de Naciones Peregrinas (Council of Pilgrim Nations), which oversees the participation of all the dance troupes in the pilgrimage. Finally, I address measures now being taken by the Consejo de Naciones in response to the glacial retreat of the Qulqipunku, how they have been received by pilgrims, how this process is affecting the pilgrimage, and finally how the media have reported on these issues.

"Father White Glacier": Climate Change, Patron Deity and Temporality in the Indian Himalayas

Karine Gagné (Department of Anthropology, Yale University)

This presentation analyzes the temporal dimensions of a glacier-related practice in Ladakh, in the Indian Himalayas, which postulates a filiation between the villagers and a glacier, and focuses on an attempt to revive its performance. According to villagers of Tingmosgang, the local *gzhi bdag*, the protector of the village glacier, is "stubborn": very often, it prevents the seasonal melt of glacier water, crucial to the success of the farming season, unless it is properly propitiated through *skyin jug*, a ritual performed throughout the Sham area of Ladakh when a bride leaves her natal household. Villagers of Tingmosgang have traditionally mimicked the ceremony of *skyin jug* in order to placate the adamant local *gzhi bdag*. Today, in Ladakh, erratic meteorological patterns and the recession of glaciers are generating recurring water problems in spring during the critical sowing season. This is taking place concomitantly to the economic restructuring of the region, which translates into a lack of agrarian workforce in the villages. I suggest that the changing agrarian timescape of Ladakh contributed to a failure to revive *skyin jug* in response to a water shortage during the spring of 2013.

The Sacred and the "Dammed": Climate Change Anxieties, Hydropower Development, and Sacred Landscapes in the Eastern Himalayas

Mabel Gergan (Department of Geography, University of North Carolina-Chapel Hill)

Since 2007, Dzongu, the indigenous Lepcha reserve in the Eastern Himalayan state of Sikkim, India, has been in the spotlight for its controversial hydropower projects and successful anti-dam movement. Both





Sikkim and Dzongu are revered as places of sacred grandeur, exceptional beauty, and bounty. While hydropower development was supported by many within Dzongu, an intensification of natural disasters alongside declining crop yield, have led to concerns around the land "losing its power". Drawing on ethnographic fieldwork, I highlight different facets of loss, both tangible and intangible, narrated by Dzongu residents in the face of growing ecological precarity. In this, I make an argument for developing a more holistic understanding of climate change in the context of infrastructural development in mountainous environments.

Melting Glaciers, Floods and Divine Punishment: Religious Responses to Climate-Change Induced Disasters in the Central Himalayas

David L. Haberman (Department of Religious Studies, Indiana University)

Among the many pilgrimages performed in northern India the Char Dham Yatra stands out as one of the most popular. For centuries Hindus have been journeying to the four sacred sites of Yamunotri, Gangotri, Kedarnath, and Badrinath, all located near the sources of rivers that eventually flow into the Ganges. A variety of beneficial religious goals and life blessings are pursued from contact with the divinities that reside in this area known as *devata bhumi*, or "land of the gods," in the Central Himalayas. These days, however, all is not well in this paradise. Climate-change related cataclysmic events, particularly recordbreaking rainfall and the deterioration of glaciers that has led to glacial lake outbursts, have killed thousands of people in the Central Himalayas with floods and landslides. Especially frightening was the destruction of the Kedarnath pilgrimage site in June of 2013. This presentation examines some of the religious responses related to this disaster in the Char Dham Yatra region. As a result of recent events there is a growing sense that the gods are now punishing humans with erratic weather and severe storms because of our irresponsible and immoral behavior.

Syncretic Landscapes and Sacred Dimensions of Changing Tropandean Climates

Fausto O. Sarmiento (Department of Geography, University of Georgia)

A comprehensive approach to assessing vulnerabilities to climate change in the Northern Andean highlands must account for the heterodox epistemologies informing the significance of Andean landscapes, including dualistic cultural complementarities often found in Andean societies. With attention to the mountains associated with the *Imbakucha* watershed in Ecuador, this presentation considers the ritual propitiation of mountain powers, telluric and marital relationships among mountains, and the sacralization of water, as these relate to fertility, goodwill, and long-lasting social relationships with these powers, and throughout the entire socio-ecological system. Using a model of geocritical inquiry and adopting a biocultural paradigm, I argue in this presentation that a bridge can be built between sustainable goals of ethno-tourism, which will be important in adapting to climate change, and indigenous views of climate and ecosystems, a bridge which helpfully links the past with the future, the local with the global, and the tangible and intangible.





Climate Change in Western Himalayas: Role of Local Knowledge and Cultural Politics in Shaping the Response of Apple Growers in India's Kullu Valley

Neeraj Vedwan (Department of Anthropology, Montclair State University)

Climate change and increased climatic variability have adversely affected the livelihoods of thousands of apple growers in the Kullu valley of the state of Himachal Pradesh in India. The apple growers, among the most severely affected sections of the population, are faced with declining yields and increased incidence of pests and disease, both results of the ongoing shifts in the region's climate. This presentation proposes a theoretical framework to analyze perceptions of climate change and variability among the apple growers. Specifically, it examines the role of both local knowledge and the broader notions of risk and vulnerability, rooted in the cultural politics and history of the region, in shaping the perceptions of climate change as a product of the knowledge of micro-level crop-climate interactions, as well as broadly shared regional cultural models of vulnerability, a general template for examining perceptions of climate change is presented. Finally, the presentation concludes with a brief discussion of the household, institutional and policy response to climate change in the region.

The Cultural Politics of Climate Change and Sacred Landscapes in Tibet

Emily Yeh (Department of Geography, University of Colorado Boulder)

In this presentation I discuss the clash of statist and Tibetan views of climate change and of sacred landscapes. I begin with an overview of a broader project of recasting of rural landscapes across China into concentrated zones of "protection" and of production, or the zones designated for ecological value and for economic value. On the Tibetan Plateau, this manifests in plans to remove rural dwellers from the landscape in the name of climate change adaptation, while the region simultaneously witnesses an increase in mining. The second part of the presentation then discusses Tibetan conceptualizations of causes of environmental degradation, including climate change, particularly on sacred landscapes. I provide an analysis of multiple religious views of the causes and consequences of environmental deterioration, including ways in which sacred mountains are said to insert themselves into human politics.