Organized by the Asia Research Institute, National University of Singapore

08:45 - 09:00	REGISTRATION		
09:00 - 09:30	WELCOME & INTRODUCTORY REMARKS		
	Mike Douglass   Asia Research Institute & Lee Kuan Yew School of Public Policy, NUS		
	Gregory Clancey   Asia Research Institute & Tembusu College, NUS		
	Eli Elinoff   Asia Research Institute & Department of Sociology, NUS		
	Tyson Vaughan   Asia Research Institute & Tembusu College, NUS		
09:30 - 10:30	KEYNOTE ADDRESS		
Chairperson	Gregory Clancey   National University of Singapore		
09:30	Kim Fortun	Disaster Analytics	
	Rensselaer Polytechnic Institute, USA		
10:15	QUESTIONS & ANSWERS		
10:30 - 11:00	TEA BREAK		
11:00 - 12:10	PANEL 1   URBAN ACTIVISM AND CLIMATE CHANGE		
Chairperson	Rita Padawangi   National University of Singapore		
11:00	Sara Fuller	Responsibility and Everyday Activism in the	
	Macquarie University, Australia	Anthropocene	
11:20	Lukas Ley	The Years of Living Dangerously: Climate Change and the Politics of Vulnerability in Semarang	
	University of Toronto, Canada		
11:40	QUESTIONS & ANSWERS		
12:10 - 13:10	LUNCH		
13:10 - 14:20	PANEL 2   KNOWLEDGE PRODUCTION FOR THE ANTHROPOCENE		
Chairperson	Lisa A. Onaga   Nanyang Technological University, Singapore		
13:10	Edmund Oh	The Rise of Fisheries Co-Management and the Re- imagining of the Vietnamese State	
	Cornell University, USA		
13:30	Tetsu Sato	Knowledge Base to Support Adaptive Decisions an Actions in Rapidly Changing Social-Ecological Systems	
	Research Institute for Humanity and Nature,		
	Japan		
13:50	QUESTIONS & ANSWERS		
14:20 - 14:50	TEA BREAK		
14:50 - 16:00	PANEL 3   LIVING AND DYING IN THE ANTHROPOCENE		
Chairperson	Malini Sur   National University of Singapore		
14:50	Andrew Alan Johnson	What Lies Beneath: Spirits, Doubt, and Wildness in	
	Yale-NUS College, Singapore	Bangkok	
		Discussing a Non-economic Rationale of Farmers'	
15:10	Esha Shah	_	
15:10	Esha Shah Indian Institute of Advanced Study, India	Suicides in India	

#### The Quotidian Anthropocene: Reconfiguring Environments in Urbanizing Asia (16 – 17 October 2014)

Organized by the Asia Research Institute, National University of Singapore

16:20 - 17:30	PANEL 4   WHERE DOES THE CITY END?	
Chairperson	Tyson Vaughan   National University of Singapore	
16:20	Ali Nobil Ahmad Zentrum Moderner Orient, Germany	Urban Marginality in Pakistan's Smaller Cities: Rethinking 'Disaster' through the 2010 Floods
16:40	Eli Elinoff National University of Singapore	Drawing the Future: Engineered Landscapes and Urban Imaginaries after the Thai Flood
17:00	QUESTIONS & ANSWERS	
17:30	END OF DAY 1	
18:00 - 20:00	WORKSHOP DINNER (For Speakers, Chairpersons & Invited Guests)	

# The Quotidian Anthropocene: Reconfiguring Environments in Urbanizing Asia (16 – 17 October 2014)

Organized by the Asia Research Institute, National University of Singapore

17 OCTOB	ER 2014 (FRIDAY)		
09:45 - 10:00	REGISTRATION		
10:00 - 11:10	PANEL 5   DISASTER IN THE AIR		
Chairperson	Kim Fortun   Rensselaer Polytechnic Institute, USA		
10:00	Jenny Elaine Goldstein University of California-Los Angeles, USA	Lots of Smoke, but Where's the Fire? Contested Causality and Shifting Blame in the Southeast Asian Smoke-Haze Crisis	
10:20	Samuel Kay Ohio State University, USA & Tsinghua University, China	Small Particles in the Big City: Uneven Adaptation and Atmospheric Governance in Beijing	
10:40	QUESTIONS & ANSWERS		
11:10 - 11:40	TEA BREAK		
11:40 - 12:50	PANEL 6   MANAGING THE CLIMATE AT HOME		
Chairperson	Mike Douglass   National University of Singapore		
11:40	<b>Danny Marks</b> University of Sydney, Australia	The Assemblage of Bangkok's Ever-Increasing Electricity Consumption: Perpetuating Environmental Injustice in the Hinterlands of the Lower Mekong	
12:00	Nikolaj Vendelbo Blichfeldt University of Copenhagen, Denmark	The Unspectacular Spectacle of Low-Carbon Life: Making Sense of Climate Change in an Urban Community in China	
12:20	QUESTIONS & ANSWERS		
12:50 - 13:50	LUNCH		
13:50 - 15:00	PANEL 7   LIFE AFTER DISASTER		
Chairperson	Michelle Miller   National University of Singapore		
13:50	<b>Tyson Vaughan</b> National University of Singapore	The Reconstruction of What? "Re-mooring" as Post-disaster Recovery for the Anthropocene Age	
14:10	<b>Vivian Choi</b> Cornell University, USA	Infrastructures of Feeling: Sensing Disaster in Sri Lanka	
14:30	QUESTIONS & ANSWERS		
15:00 - 15:30	TEA BREAK		
15:30 - 16:30	CLOSING REMARKS		
	Eli Elinoff   Asia Research Institute & Department of Sociology, NUS Tyson Vaughan   Asia Research Institute & Tembusu College, NUS		
16:30	END OF WORKSHOP		

#### KEYNOTE ADDRESS

#### **Disaster Analytics**

Kim Fortun Rensselaer Polytechnic Institute, USA fortuk@rpi.edu

How can one think through disaster, and what kind of analytic purchase results? This presentation will revolve around this question, exploring how and why to pursue comparative disaster studies, and why it makes sense to think in terms of both acute, catastrophic disaster and chronic, slow disaster – drawing together thinking about Fukushima, Bhopal and deepwater drilling for oil, climate change, the shale gas boom, and the global asthma epidemic. Mindful of discursive and political risks in apocalyptic gestures, I will nonetheless argue for intensified, strategic engagement with disaster analytics, leveraging what postcolonial critic Gayatri Spivak has called "forced readings." This is especially important in our current historical period, which I think of as "late industrialism." Beginning in the mid-1980s, marked heuristically by the 1984 Bhopal disaster, late industrialism is characterized by both acute and chronic disaster, emergent from tightly coupled, ecological, technological, political, economic, social and cultural systems, many of which are over-extended, fractured by serial retrofitting, and notably difficult to visualize, conceptualize and coordinate response to.

**Kim Fortun** is a cultural anthropologist and Professor of Science & Technology Studies at Rensselaer Polytechnic Institute. Her research and teaching focus on environmental risk and disaster, and on experimental ethnographic methods and research design. Her research has examined how people in different geographic and organizational contexts understand environmental problems, uneven distributions of environmental health risks, developments in the environmental health sciences, and factors that contribute to disaster vulnerability. Fortun's book *Advocacy After Bhopal Environmentalism, Disaster, New World Orders* was awarded the 2003 Sharon Stephens Prize by the American Ethnological Society. From 2005-2010, Fortun co-edited the *Journal of Cultural Anthropology*. Currently, Fortun is working on a book titled *Late Industrialism: Making Environmental Sense*, on *The Asthma Files*, a collaborative project to understand how air pollution and environmental public health are dealt with in different contexts, and on design of the Platform for Experimental and Collaborative Ethnography (PECE), an open source/access digital platform for anthropological and historical research. Fortun also runs the EcoEd Research Group, which turns ethnographic findings about environmental problems into curriculum delivered to young students (kindergarten-grade 12), and is helping organize both the Disaster-STS Research Network, and the Research Data Alliance's Digital Practices in History and Ethnography Interest Group.

#### **Responsibility and Everyday Activism in the Anthropocene**

Sara Fuller Macquarie University, Australia sara.fuller@mq.edu.au

In conceptualisations of climate justice, the issue of responsibility is fundamental. It is widely acknowledged that responding to climate change consists of two basic duties – mitigation and adaptation. The allocation of responsibility for fulfilling these duties is, however, highly contested and gives rise to questions about how responsibility might be distributed between different actors but also around procedural dimensions such as the duty of particular actors to participate in decision making. In urban spaces, responsibility for climate mitigation is often articulated through carbon footprints, which seek to foster a sense of accountability and action in both material and moral terms at the individual, household and community level. While this 'everyday activism' forms part of responses to the grand narratives of the anthropocene – both crisis and opportunity – there has been little critical interrogation of such activism in relation to the specific question of responsibility to date. This paper seeks to address this issue by considering the case of Hong Kong, and the articulation of carbon footprints in this complex urban space. In so doing, it aims to broaden understandings about how responsibility is conceptualised, experienced and enacted at an everyday level and consider if and how a climate justice perspective allows a new understanding of individual responsibility in the context of wider global environmental change.

**Sara Fuller** is a Lecturer in the Department of Environment and Geography at Macquarie University, Australia. Her research explores concepts and practices of justice and democracy in the field of the environment, with an empirical focus on grassroots, community and activist responses to climate change. Prior to joining Macquarie, she worked and conducted research in the UK and Hong Kong. She has a strong commitment to research that is both policy oriented and academically relevant, and to the use of participatory techniques and methodologies. Recent research has included work on NGO discourses of energy justice; low carbon communities and climate justice; and energy vulnerability in communities.

#### The Years of Living Dangerously: Climate Change and the Politics of Vulnerability in Semarang

Lukas Ley University of Toronto, Canada lukas.ley@mail.utoronto.ca

Semarang, the capital of Central Java, is feeling the effects of climate change on a daily basis. The city's drainage system is overburdened with accelerating environmental transformations like land subsidence and sea level rise. The city government responds to this emergency mainly by lifting streets over sea level and providing financial aid to residents to raise house floors as the water rises. However, many dwellings in the poor area along Banger River, where I lived from April to June 2014, have been destroyed by intruding sea water and left in ruins. Infrastructural adaptation has been key to preserving residential space, but intervention is fragmented and impulse-driven. This paper considers the role of BAPPEDA, the city planning agency, and other environmental actors in reconfiguring Semarang's approach to flood management. At the heart of the agency, a "City Team" was formed, which joins the "Asian Cities Climate Change Resilience Network" created by the Rockefeller Foundation. By uniting BAPPEDA staff, local academic experts, and NGO workers, the Team attempts to integrate predictions of climate change into governmental plans with the aim of building sustainable urban "resilience." While paying attention to the Team's struggles to mainstream sensitivities to climate risks and vulnerability, this paper also addresses the very fragmentation and coexistence of environmental practices regarding flood prevention. What are the new environmental subjects (Agrawal 2005) that emerge from conflicts over planning objectives, prioritization, and budgeting? The Team's problem- solving approach effectively depoliticizes urban space (Swyngedouw 2009), as I argue. However, by screening out existing coping mechanisms it not only fails to address the sociopolitical context of intervention but also creates a new politics of vulnerability.

**Lukas Ley** is a PhD Candidate at the Department of Anthropology, University of Toronto. His doctoral supervisors are Prof Tania Li and Prof Joshua Barker. Lukas holds a Master's degree in Social Anthropology from Paris School for the Advanced Studies in Social Sciences (EHESS) as well as an undergraduate double major in Sociology and Sociocultural Anthropology. For his Master's thesis, Lukas has conducted ethnographic research on the social organisation of illegal neighbourhoods in Jakarta. Currently, he is doing fieldwork on the politics of climate change and vulnerability in Semarang, Indonesia, and its role in reconfiguring flood management. As a graduate student, Lukas has co-founded the international student magazine "Journal of Urban Life" (www.jul-magazine.com) of which he has been the chief editor since 2012.

#### The Rise of Fisheries Co-Management and the Re-imagining of the Vietnamese State

Edmund J.V. Oh Department of Development Sociology, Cornell University, USA ejo8@cornell.edu

In the face of growing resource overexploitation exacerbated by the effects of climate change, many have described the introduction of co-management in Vietnam's fisheries sector as a potential panacea. Indeed, comanagement—a mode of resource governance where local resource users share decision-making authority and responsibility with the government over the management of a particular resource—has yielded impressive improvements in sustainability and equitability where it has been implemented in coastal resource systems elsewhere in the world. Because the piloting of co-management entails the transfer of such experience and expertise, it has been portrayed primarily as a development intervention aimed at tackling the poor design and enforcement of rules governing resource use. Yet in Vietnam, where exclusive state control over all natural resources is a central principle of the socialist nation-state, co-management represents much more than an enlightened approach to resource management. Drawing on theory on the politics of scale, I argue in this paper that co-management can also be understood as a distinct and radical break from the status quo with the potential to spark a rethinking of the relationship between society, nature, and the state on one hand, and the relationship between different levels of governance within the state on the other. Building on interviews, analysis of documents, and participant observation in several co-management pilot projects in the Mekong Delta, I demonstrate various ways in which co-management arrangements embed themselves in and invariably reconfigure-existing webs of power relations between different scales of governance. At stake, therefore, is not only the state of nature, but also the nature of the state. Such a political reading of comanagement, however, is obscured by the technical, 'developmentalist' policy discourse that tends to predominate. The pragmatism and political appeal of this highly technical interpretation of co-management, I suggest, lies in its ability to confine the sharing of power within the relatively 'safe' realm of resource management (and no further), while legitimizing and entrenching relations of power. I further suggest that the rise of co-management thus far is emblematic of the slow, gradual, messy—and quotidian—way that policy innovation occurs in Vietnam amidst the tensions between different scales of governance. The ability of a few 'policy entrepreneurs' to bring co-management to bear despite the lack of an enabling policy environment may therefore have far-reaching implications. These insights are aimed at challenging the prevailing technicist emphasis on good governance among development scholars that fails to engage sufficiently with theories of power and the state.

**Edmund J.V. Oh** is a PhD Candidate and Fulbright Fellow in the Department of Development Sociology at Cornell University, USA. He earned an M.Phil. in Environment and Development from the University of Cambridge and an M.Sc. in Environmental Science and Technology from the UNESCO-IHE Institute for Water Education, Delft, the Netherlands, along with a B.App.Sc. in Environmental Biology from Universiti Sains Malaysia. He was formerly a researcher at the WorldFish Center—an international research organization dedicated to reducing poverty and hunger by improving fisheries and aquaculture—where he worked with other researchers in the Mekong region in Southeast Asia to understand and find ways to improve the governance of wetlands.

#### Knowledge Base to Support Adaptive Decisions and Actions in Rapidly Changing Social-Ecological Systems

Tetsu Sato Research Institute for Humanity and Nature, Japan tetsu@chikyu.ac.jp

In the rapidly changing social-ecological systems in Asia, quotidian practices to respond, adapt and improve environmental as well as societal changes are essential to solve diverse environment problems at various scale levels. We focused on the formation and circulation of a novel concept of local knowledge (Integrated Local Environmental Knowledge, ILEK) blending scientific and local knowledge productions. We examined mechanisms to facilitate production and circulation of ILEK to achieve collective decision making and actions of diverse stakeholders to mobilize local communities toward sustainability. A wide range of cases of solutionoriented scientific research and local knowledge productions through daily practices of stakeholders are going on in the world. We conduct meta-analysis of these case studies to clarify formation mechanisms of ILEK, and to identify drivers of adaptive governance using ILEK as a knowledge base. Residential researchers living in local communities as a stakeholder to produce solution-oriented transdisciplinaty knowledge sets were found to play important roles to co-produce and co-deliver ILEK. Bilateral translators of knowledge promoted circulation of ILEK across different framing among stakeholders, including circulation of knowledge across multiple scales from local to global. Such cross-level knowledge translations suggested potentials of multiscale collaborative actions to tackle with global level problems. Based on these results, we constructed a conceptual model of ILEK-based adaptive governance, and developed hypothetical sets of drivers of adaptive decision making and actions. This paper will summarize these results to try to clarify way forwards for formation of "science with society" and "society making full use of science" to live with "Quotidian Anthropocene".

**Tetsu Sato** is Professor and Deputy Director-general at the Research Institute for Humanity and Nature (RIHN), Japan. He received his Doctor of Science degree from Sophia University, Tokyo (Behavioural Biology, 1985). He was an associate professor at Department of Biology, University of Malawi, Republic of Malawi (1997-), conservation director of WWF Japan (2001-), a professor of ecology and environmental science at Nagano University (2006-), a professor at RIHN (2012-present) and Deputy Director-General at the RIHN (2013-present). His major field of interest is creating scientific knowledge bases for sustainable development and community-based management of ecosystem services. He also led a project to create a network of local scientists producing Integrated Local Environmental Knowledge, and is currently serving as the project leader of RIHN initiative-based project entitled "Creation and Sustainable Governance of New Commons through Formation of Integrated Local Environmental Knowledge (ILEK project). His recent research publications relate to the scientific bases for community-based management of local social-ecological systems.

#### What Lies Beneath: Spirits, Doubt, and Wildness in Bangkok

Andrew Alan Johnson Yale-NUS College, Singapore Johnson.andrew.alan@gmail.com

On the new highways radiating out from Bangkok, amidst rows of concrete shophouses and the floodlights of new "lifestyle malls," are shrines to what once existed. Spectral elephants, snakes, and trees stand in for biological versions. Like their wild [*theuan*] biological precedents, these spirits are menacing to some, offering traffic accidents and vicious hauntings, and guardians to others, giving lottery numbers and protections from traffic accidents. They especially find appeal amongst marginal and precarious workers.

For their devotees, these figures represent a particular vision of a city that rests upon the bones of what had been paved over. It is neither a triumphal narrative of technological progress nor nostalgia for what was lost. Amongst Thai-Lao migrant workers in Bangkok, I found that underlying the network of human-spirit relations – namely, kin and contractual ties between humans and spirits - lay the problem of doubt. The presence of spirits, the identity of one's spirit interlocutor, and the nature of the human-tree interaction were always open questions. Complicating this picture was a fundamental doubt as to hidden qualities of the self – devotees were never certain as to their own merit, karma, or fate and sought spiritual insight into these. With this in mind, I argue that spirit devotees invoke a barrier to knowledge when talking about their spirit interlocutors as well as their own inner qualities. Such a perspective builds upon and informs our conception of "animism" and the way that we can theorize interrelationality between humans and their environment.

**Andrew Alan Johnson** is an Assistant Professor of Anthropology at Yale-NUS College. He received his Ph.D in anthropology from Cornell University in 2010 and has previously held positions at Sogang University, Columbia University, and here at the Asia Research Institute. He is the author of *Ghosts of the New City*, published in 2014 by University of Hawai`i Press, and has published in *Cultural Anthropology, American Ethnologist,* and *Anthropological Quarterly*, among others. His previous work has dealt with urbanization, architecture, popular Buddhism, and spirit cults in Bangkok and Chiang Mai. His latest work is on animism and environmentalism along the Mekong.

#### Discussing a Non-economic Rationale of Farmers' Suicides in India

Esha Shah Indian Institute of Advanced Study, India esha.shah@live.com

A guarter of million farmers in India have committed suicide in the last decade and half. These incidents are linked with what is widely called agrarian crisis. A burgeoning body of scholarly literature associates suicides with the political economy of agrarian change since the introduction of the green revolution, more intensely so with the liberalization and globalization and with the widespread ecological change. Most commonly the suicides are related to the unprofitable nature of agriculture and various forms of water and resource scarcities. The suicides are thus tied down to various forms of economic rationality even those emerging from the ecological crisis. Consequently, the dominant developmental response to farmers' suicides is to make agricultural economics remunerative through a variety of techno-institutional changes. A second green revolution and genetically modified crop biotechnology are widely proposed and justified, while paradoxically, these are the same techno-institutions have been considered responsible for causing suicides. Usually the criteria such as profitability of agriculture and a narrow timeline of the change occurring in the last couple of decades are followed in these economic approaches to remedying agrarian distress. Here, I aim to challenge the predominantly economic rationale of the suicides and wish to provide an alternative explanation by employing a different methodological scale of time and engaging with the wider cultural and public sources of evidences. I claim that the focus on different scale of time and temporal relations can provide us with a different historical perspective on change. The historian Fernand Braudel argues that structures both mental and environmental, determine the long-term course of events and constrain actions over duration so long enough that they remain beyond the consciousness of the actors involved. To map this consciousness or, in other words, public morality affecting rural alienation and agrarian distress, the essay will not only follow a longer timeline bur will also derive its arguments from the media, fictional and cinematic sources, in addition to the anthropological and historical sources.

**Esha Shah** is an engineer by training and anthropologist and historian by choice and self-learning. Since her doctorate from the Wageningen University in the Netherlands, she has been working on science and technology-led development in India on the interface of modernity and democracy. Since her doctorate, she has held research and teaching positions at ISEC in Bangalore, Institute of Development Studies at University of Sussex, UK, and Faculty of Arts and Social Sciences in Maastricht University, the Netherlands. Currently she is a fellow with the Indian Institute of Advanced Study in Shimla, and also a senior fellow with the Center for the Study in Culture and Society in Bangalore. Recently, she has been working on what she calls *affective histories* of the modes of rationality -- how affects and emotions lead the way for *belonging* ahead of the modes of rational and deliberative thought. She is presently working on a monograph that will re-interpret the history of reductionism in genetic science over the twentieth-century as an affective/emotive history. In the book, she aims not only to posit that the intellectual paradigms are *isomorphic* with the world emotionally and existentially desired, but also to question the scientist-subject as the neo-Kantian, transcendental self.

#### Urban Marginality in Pakistan's Smaller Cities: Rethinking 'Disaster' through the 2010 Floods<sup>1</sup>

Ali Nobil Ahmad Zentrum Moderner Orient, Germany Ali.NobilAhmad@zmo.de ; alinobil@gmail.com

In July 2010, catastrophic floods left around a fifth of the Pakistan's total land area underwater. Dominant media discourse portrayed the floods as a 'natural' environmental disaster affecting remote rural peripheries. I explore the anthropocenic causes and consequences of the 2010 floods in Pakistan, focusing on the implications of rural displacement in medium sized towns and cities in Southern Punjab. Where the bulk of literature on urbanization in South Asia focuses on 'megacities' like Karachi and Mumbai, there is relatively little discussion of demographic pressure in the newer constellations of urban sprawl that have spilled out of agrarian settlements. These last zones are the ones most directly affected by 'environmental' disaster like flooding, yet their infrastructural capacities are often even less than those of cities highlighted in the burgeoning literature on 'slums'. Indeed, neglect of 'the rural' in current literature on urbanization, I argue, is evidence of a misplaced idea that peasant populations and spaces are somehow becoming irrelevant in Asia. If recent transformations and migration across the region are rightly bringing urbanization into the spotlight, planners and scholars would do well to consider the ways in which configurations of power and socio-spatial relations between urban and rural Asia will crucial in the coming decades of environmental turbulence.

Following Kenneth Hewitt's critical geography of 'disasters', I use qualitative data from interviews and ethnographic research with local communities, activists and whistleblowers in officialdom to argue that the calamitous events of 2010 were anything but aberrations from normality. Rather, 'disaster' during and after the floods merely exposed quotidian realities and relations of power normally hidden from view: above all, highly unequal distributions of risk, evidenced in the actions of local politicians who manipulated levees to protect privileged populations, crops and infrastructure; also, in 'rehabilitation', which was subject to all the usual distortions in governance associated with bureaucratic and state power in Asia – corruption, patronage and cronyism.

Novel aspects of governance (or rather 'governmentality') emerged in encounters between displaced 'rural' populations seeking help from local government offices in towns and cities. I discuss how 'aid' was laden with new bio-political dimensions influenced by the War on Terror: heavy-handed riot police and biometric registration systems complicated innocent notions of charity; anti-terrorist legislation was used to prosecute a local Mayor critical of government decision-making before and after the floods. In typically opaque fashion, the government of Punjab refused to publish the findings of its Lahore-based inquiry into what caused the floods. My own interviews with local engineers and construction workers shed light on the international, political and urban dimensions of processes thought to be 'rural' and geophysical: a World Bank 'rehabilitation project' (2004-9) was widely thought to have contributed to the flood by raising riverbed levels.

The paper concludes with a discussion of how local activists and communities responded to the 2010 floods through languages and discourses of resistance couched in an ethnic ('Seraiki') identity. Using video footage of protests, 'People's Tribunals' and poetry readings in which culture was used to express dissent, I show that critique of the state and its functionaries took vernacular forms that bore no relationship with the dominant macro national 'Islamic identity'. Its authority drew instead on local knowledge and the inherent dignity of

<sup>&</sup>lt;sup>1</sup> The author would like to thank Asad Farooq (LUMS) and friends at Hirraq Foundation in Kotadu whose support networks, video archives and wisdom based on years of activism in the Siraiki belt was generously shared at important points during the research process. Thanks also to research assistant Faheem Ameen and LUMS students who helped with translation of the Siraiki interviews; and to colleagues at ZMO (especially Katharina Lange and Katrin Bromber) whose feedback on an earlier draft of this paper has been extremely useful. (Errors of fact or opinion are my own).

rural cultures which remain the fabric of quotidian life among river-basin communities in Southern Punjab and Sindh. In the small towns and cities of urbanizing Pakistan, their intimate relation with the Indus is acquiring new relevance under climate change.

Ali Nobil Ahmad is a post-doctoral researcher at the Zentrum Moderner Orient in Berlin. His research project on 'Ideology and Politics of Resources in Pakistan' is part of a cluster of post-doctoral projects focussed on the 'Politics of Resources' in Muslim societies. In 2013-14 he was Madeleine Haas Visiting Professor at Brandeis University in Boston, where he taught courses on Pakistani History, and State and Society. Prior to that he was based at the Lahore University of Management Sciences in Pakistan (2009-2014), where he is currently still Assistant Professor of History in the Department of Humanities and Social Sciences. At LUMS he taught courses on modern history and political ecology, and co-convened the 2012 conference on 'Asian Ecologies'. (He is currently co-editing the proceedings for a journal special issue). He completed his doctorate on migration human smuggling from Pakistan at the European University Institute in Florence, Italy, in 2008. (It was published by Ashgate in October 2011). He has a background in journalism and a keen interest in media and film. In 2008 he was recipient of *The Guardian*'s Scott Trust bursary and wrote regularly for the Society pages.

#### Drawing the Future: Engineered Landscapes and Urban Imaginaries after the Thai Flood

#### Eli A. Elinoff

Asia Research Institute, National University of Singapore soceae@nus.edu.sg; arieae@nus.edu.sg

For a brief period after Bangkok's 2011 floods, the city's urban landscape came into sharp focus. The disaster, the fourth costliest in world history, highlighted new questions about the interlocking features that conspire to produce the urban landscape. Land use practices in and beyond the city, zoning laws, flood prevention infrastructures, green spaces, and urban materialities were suddenly central to emerging concerns about the city and its future. In the aftermath of the floods, a number of visions of the urban landscape have emerged in an effort to rethink the arrangements between humans and nature in the Thai metropolis. In this paper, I explore these visions of the Thai urban future arguing that the floods revealed the landscape as a set of dilemmas rooted in the imminence of catastrophe, but tied more deeply to the complex and entangled everyday processes associated with the production of urban space. Indeed, as I argue here, although the disaster has provoked a new discussion about the landscape, the visions produced in its wake do nothing to attend to these dilemmas except elide them. In doing so, such speculative portrayals reposition engineering, architecture, and urban expertise ignoring the political consequences of such practices. I demonstrate this point, considering three different visions of the city: The first is proposed by the Siam Cement Group which offers a vision of a seamless urban transition facilitated by the proper deployment of expertise and improved materiality. The second is a conceptual landscape design created by a Bangkok-based landscape architecture firm entitled "Ayutthaya 2050" in which flood itself becomes the object of engineering producing a new riparian urbanism for a new urbanism. The last is the "un-built," quasi-speculative, 11 billion USD flood Thai mitigation project, a project whose production evoked the landscape dilemma but was unable to surmount it. By exploring these distinct visions in relation to one another, this paper shows how the quotidian experience of the changing urban landscape simultaneously produces and undermines these speculative futures.

**Eli Elinoff** is currently a joint Postdoctoral Fellow in Asian Urbanisms in the National University of Singapore's Department of Sociology and the Asia Research Institute. He received his PhD in Anthropology from the University of California, San Diego. He is currently working on a book manuscript that considers Thailand's struggles over democracy through an ethnographic examination of new forms of participatory urbanism in slum and squatter settlements in the northeastern Thailand. He has publications in *South East Asia Research* and *Political and Legal Anthropology Review.* He has also begun new research on urban ecologies and concrete in contemporary Thailand.

### Lots of Smoke, but Where's the Fire? Contested Causality and Shifting Blame in the Southeast Asian Smoke-Haze Crisis

Jenny Elaine Goldstein University of California-Los Angeles, USA jgoldstein@ucla.edu

Subterranean peat fires have become a peculiar feature of Southeast Asia's socio-ecological landscape in the Anthropocene: they occur only if a peat swamp is drained for development, yet they spread uncontrollably and can go undetected for months. While forest fire smoke was once largely confined to rural areas, noxious haze from Indonesia's peat fires now frequently reaches Singapore, the Malaysian peninsula, and beyond. Originating in Sumatra and Kalimantan, the fires' haze is associated with unhealthy air particulate matter across the region and massive greenhouse gas emissions. The smoke-haze has also sparked international tension over who, and what, is to blame for the pollution and who should be held responsible for managing these fires. Though ASEAN has called for legislation to mitigate the smoke-haze, the origins, causes, and trajectories of Indonesia's peat fires remain murky. Historically, forest fires in Indonesia were blamed on quotidian practices of smallholder farmers such as small-scale land clearing, cooking over open fires, and tossing cigarette butts. Yet as the peat fires have become more frequent and and their consequences farther reaching, these localized causal explanations no longer seem adequate. This paper analyzes current discourses surrounding blame for the extra-territorial smoke-haze and shows how the biophysical materiality of peat fires complicates efforts to determine precise causes of the fires.

**Jenny Elaine Goldstein** is a Doctoral Candidate in Geography at University of California-Los Angeles (UCLA). Her dissertation, *Scientific Knowledge, Climate Change, and the Remaking of the Peatlands in Central Kalimantan, Indonesia*, draws together political ecology, environmental history, and STS frameworks. Though archival and ethnographic methods, she is looking at the history of a mega-development project a one-million hectare peat swamp in Indonesian Borneo. In particular, she is interested in how various iterations of scientific expertise— including contemporary climate science and an emerging global discourse on the relationship between climate change and tropical peatland emissions—are shaped by socio-ecological landscape change. She is conducting fieldwork in Indonesia through 2014, which has been generously supported by Fulbright, the University of California Pacific Rim Research Program, the American Institute for Indonesian Studies, and UCLA's Southeast Asian Studies Center. Prior to Indonesia, she conducted fieldwork in Rwanda and Japan. She also holds an M.A. in Geography from UCLA and a B.A. in Architectural Theory from Barnard College.

#### Small Particles in the Big City: Uneven Adaptation and Atmospheric Governance in Beijing

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Something is floating in the air in Beijing that is slowly killing people. Effective mitigation measures to reduce the amount of air pollution in the city are stalled. In the absence of timely mitigation, the only thing standing between Beijing residents and an increased risk of disease is adaptation, but Beijing's adaptation landscape is highly uneven. While a small portion of Beijing residents take extreme measures to limit their exposure to air pollution, most people go about their daily lives more or less fully exposed to and often unaware of air pollution. Drawing on ethnographic fieldwork conducted in Beijing and a database of nine months of Chinese micro-blog posts on the topic of air pollution, I examine how techniques of knowledge production and dissemination – along with everyday practices of adaptation, maladaptation, and exclusion – are productive of a particular regime of urban atmospheric governance. I argue that through environmental discourses, Chinese citizens are sorted into categories of "knowledgeable/adapting" and "ignorant/non-adapting." Concepts such as pollution and risk have come to be applied differently to these different groups. In other words, not only is exposure to air pollution highly uneven, but through a series of everyday practices and discourses, this unevenness is justified and normalized. The result is that perhaps hundreds of millions of years of life expectancy are being denied to some and hoarded by others. It is my goal to offer a critique of Beijing's regime of urban atmospheric governance and thus contribute to a popular politics of the Chinese urban atmosphere.

**Samuel Kay** holds an M.A. in Geography (2014) from The Ohio State University. Before starting his PhD work, Sam is improving his Mandarin as a lecturer for Tsinghua University's Department of Foreign Languages and Literatures. Sam's research interests focus on the environmental politics of urbanisation, especially questions of public health, environmental justice, and urban-rural linkages. He organised a session on multi-scalar environmental governance for the international Dimensions of Political Ecology conference held in Lexington, Kentucky, where he won the graduate student paper competition. He also serves on the editorial board of a new graduate-student-run blog devoted to China Geography. When not exposing his lungs to toxic particulate matter for the sake of knowledge, he enjoys using them to sing and play the tuba.

## The Assemblage of Bangkok's Ever-Increasing Electricity Consumption: Perpetuating Environmental Injustice in the Hinterlands of the Lower Mekong

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Sassen and Dotan (2011, 832-833) argues that there is a need to conduct more research on "the geography of the environmental damages [a city] produces" and to raise consciousness of this damage by "by making visible the multiple components of those geographies." In particular, they call for this research to include the dimensions of power, inequality, and social justice. In this paper, I attempt to help fill this gap by using a case study from the Lower Mekong Region. Bangkok's ever-expanding electricity demand coupled with the political economy of the Thai energy sector is contributing to unequal environmental and social changes far away from Bangkok in the Mekong River Basin, particularly through the expansion of hydropower dams in Thailand's neighbors, especially Laos. Bangkok consumes about a quarter of the country's electricity and its big malls consume more than some of the country's smaller rural provinces. Simultaneously, the city's ever-increasing electricity demand is driven by urban residential expansion on the peripheries within Bangkok but also in surrounding provinces. This expansion is mostly in the form of townhouses and detached housing.

At the same time, Thailand's electricity sector has a "cost-plus" tariff system which guarantees that the Electricity Generating Authority of Thailand (EGAT) earns revenues based on the amount of electricity it sells and legal mechanisms which allows EGAT to pass the costs of over-investment to consumers by raising tariffs. Largely due to community and NGO protests against dams within Thailand, EGAT has decided to buy electricity from Thailand's neighbors, particularly in autocratic Laos. This increased demand for electricity has spurred increased uncoordinated hydropower investment in Laos, contributing to local communities being relocated, threatening food security, and, as dam expansion continues, causing a number of negative environmental changes downstream, including in the Mekong Delta.

The paper uses case studies of Xayaburi Dam, which is currently being built, and the Theun-Hinboun Dam, which was built in 1998 and expanded in 2012. Both dams are on the Mekong mainstream and most of the electricity generated from them will be exported to Thailand. It seeks to tease out the geographies of environmental injustice which are being perpetuated due to the political economy of Bangkok's rising electricity demand and to show how the metabolism of cities changes "natures" in the hinterlands.

**Danny Marks** is currently a PhD Candidate at the University of Sydney's School of Geosciences, studying the urban political ecology of the 2011 flooding in Bangkok. Danny has spent a number of years working in mainland Southeast Asia, particularly in the field of climate change adaptation. He has worked for the NGO Forum on Cambodia, the Rockefeller Foundation, the World Bank's East Asia and Pacific Governance Hub, and other organizations. In 2010, funded by the David L. Boren Fellowship, he conducted research at the Institute of Security and International Studies (ISIS) of Chulalongkorn University on the impacts of climate change on Thailand and Thailand's climate change policy process. He has published on climate change policy in Asia and Thai domestic politics in *Contemporary Southeast Asia, Journal of Contemporary China, Bangkok Post, The Nation, Shanghai Daily, Myanmar Times, International Relations and Security Network (ISN),* among others.

### The Unspectacular Spectacle of Low-Carbon Life: Making Sense of Climate Change in an Urban Community in China

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Responding to government calls for climate change mitigation initiatives, a group of community officials and retired residents in the urban residential community Dongping Lane in Hangzhou, capital of Zhejiang Province in eastern China have developed and implemented a campaign addressing consumer practices in the everyday lives of citizens through a series of activities such as lectures, exhibitions of low-carbon handicrafts, excursions to a landfill and a competition to become model households under the heading "low-carbon life". Based on 8 months of ethnographic fieldwork in the community, this paper examines the intersection of universalising claims and particular cultural and social contexts in this community-based confrontation with the predicament of the anthropocene, i.e. that human consumption activity is altering the composition of the atmosphere in ways that may render the planet uninhabitable for human beings. The primary focus of the paper is on local interpretations of low-carbon life produced in a tension between claims to be an exemplary community and an inconspicuous, low-key approach to climate change mitigation. The retired residents perform a series of embeddings of the claims and requirements of the campaign into local ways of knowing the world that draws on their experience of simple material conditions and coercive mass-mobilization the Mao era, contemporary projects of civilizing and community building, health concerns in an increasingly toxic urban environment, and critical cross-cultural juxtaposition of their own situation with distant others who are also facing the predicament of the anthropocene.

**Nikolaj Vendelbo Blichfeldt** holds a Master's Degree in anthropology and Chinese from the University of Aarhus. He is currently in the final stages of writing up his PhD dissertation at the Institute of Cross-Cultural and Regional Studies at the University of Copenhagen. He has lived for four years in China in Shanghai, Urumqi and Hangzhou as a student, teacher and researcher. His research interests include environmentalism, climate change and everyday life in urban China with a focus on the ways citizens interpret and respond to environmental issues. The topic of his PhD dissertation is sense-making processes and notions of exemplarity in a climate change mitigation campaign among pensioners in Hangzhou.

### The Reconstruction of What? "Re-mooring" as Post-disaster Recovery for the Anthropocene Age

#### **Tyson Vaughan**

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In the Anthropocene Age, environmental and sociotechnical disruptions have become the norm. "Envirotechnical" disasters seem to occur with increasing frequency and ferocity. Especially in many Asian communities, pre-catastrophe preparation and post-disaster recovery have become near-continuous processes that consume ever more attention and resources in the daily lives of citizens, in the writings and discussions of scholars, and in the budgets and policies of governing entities. In such a context, what is the meaning of "recovery"? This paper compares several cases of post-disaster recovery across Asia, plus one in the United States, to illustrate how different experiences and interpretations of catastrophic rupture produce differently situated assumptions about the fundamental goals of such recovery. These differences drive controversies over competing sociotechnical imaginaries, with real consequences for individuals, communities, and the configuration of their (built and natural) environments. The comparative approach brings patterns to the fore, sketching the beginnings of a framework for understanding why "the authorities" so often push for recovery "solutions" diametrically opposed to the desires of local residents and affected communities. Synthesizing these patterns and drawing upon the case of Minamata, Japan, the paper proposes *moyai-naoshi*, or "re-mooring," as an apropos framework for conceptualizing and governing post-disaster recovery in the Anthropocene Age.

**Tyson Vaughan** is a Postdoctoral Research Fellow in the Asian Urbanisms and Science, Technology & Society clusters at the Asia Research Institute of the National University of Singapore. His research interests revolve around disaster studies, public engagement with technoscience, and democratic governance of envirotechnical risk and sociotechnical order. He is a co-founder, along with Nanyang Technology University, Assistant Professor Lisa Onaga and former ARI Postdoctoral Fellow Honghong Tinn, of the academic blog *Teach 3.11*. He holds a PhD in Science & Technology Studies from Cornell University and a BA from Stanford University.

#### Infrastructures of Feeling: Sensing Disaster in Sri Lanka

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This paper examines the development of different types of infrastructures in Sri Lanka, amidst the intertwined complexities of two disasters: the 2004 Indian Ocean Tsunami and the decades-long civil war in which the Sri Lankan government was battling the Liberation Tigers of Tamil Eelam. While the Sri Lankan government focused on the creation and implementation of new disaster infrastructures, namely a national disaster warning system, my ethnographic fieldwork revealed that other warnings systems — or infrastructures of feeling (Williams 1976; Gilmore forthcoming) — were also in play for those who experienced the devastation of the tsunami *and* war-related trauma. In particular, I highlight Sri Lankans' attunement to weather and climate, superstitions, the behavior of animals and insects — that is, how disaster is sensed, beyond institutionalized warning systems in place. These emergent infrastructures of feeling do not merely illustrate a lack of faith in national and state-sponsored infrastructures, but also show how approaches to the potential threat of nature articulate with Sri Lanka's enduring and complex history of socio-political strife. Based on 18 months of fieldwork in areas affected by both the tsunami and the war in Sri Lanka, this paper illustrates how constructions of new disaster infrastructures map onto an extant infrastructure of war and violence, both institutionally and in daily life.

**Vivian Y. Choi** is a cultural anthropologist with special interests in disaster, disaster management and governance, nationalism, postcolonialism, and science and technology studies. She earned her PhD in anthropology at the University of California, Davis in 2012. She spent the last two years as a Mellon Postdoctoral Fellow at the Society for the Humanities and in the Department of Science and Technology Studies at Cornell University. In January she will start a postdoctoral fellowship in the Department of Anthropology at the University of Tennessee. She is currently working on her first book manuscript, tentatively titled, "Disaster Nationalism: Tsunami, War, and Insecurity in Sri Lanka," which examines the social, political and technological intersections of the 2004 Indian Ocean Tsunami and the decades-long civil war in Sri Lanka which ended in 2009. She also serves as co-editor for the On-line Photo Essay Initiative for the journal Cultural Anthropology, and is always seeking photo essay submissions!

## ABOUT THE CHAIRPERSONS

**Gregory Clancey** is an Associate Professor in the Department of History, the Leader of the STS (Science, Technology, and Society) Research Cluster at the Asia Research Institute (ARI) and Master of Tembusu College at NUS. He formerly served NUS as Assistant Dean of the Faculty of Arts and Social Sciences, and as Chairman of the General Education Steering Committee, on which he's still a member. Assoc Prof Clancey received his PhD in the Historical and Social Study of Science and Technology from MIT, and has been a Fulbright Graduate Scholar at the University of Tokyo, and a Lars Hierta Scholar at the Royal Institute of Technology (KtH) in Stockholm, Sweden. He has won three NUS teaching awards. Assoc Prof Clancey's research centers on the cultural history of science & technology, particularly in modern Japan and East Asia. His book *Earthquake Nation: The Cultural Politics of Japanese Seismicity* (Berkeley: U. of California Press, 2006) won the Sidney Edelstein Prize from the Society for the History of Technology in 2007, and was selected as one of the "11 Best Books about Science" for the UC Berkeley Summer Reading List, sent to all incoming Freshmen in 2009. He is co-editor of *Major Problems in the History of American Technology* (Boston: Houghton-Mifflin, 1998) and *Historical Perspectives on East Asian Science, Technology and Medicine* (Singapore: Singapore U. Press & World Scientific 2002). In 2012 he was the recipient of MIT's Morison Prize, awarded for significant contributions to education and research in STS.

Lisa A. Onaga joined the School of Humanities and Social Sciences at NTU as an assistant professor in 2012. She received her M.A. and Ph.D. degrees from the Department of Science & Technology Studies at Cornell University, and she received her Sc.B. in biology from Brown University. Her research on the history of biology in Japan examines how and why the study of heredity and genetics grew alongside the booming raw silk trade of early twentieth century. Her book project, "Anatomy of a Hybrid: A Sericultural History of Genetics in Modern Japan," illustrates why the rationalization of silkworm husbandry serves as a potent site for understanding a nation's entangled interests in industry and trade, biology, and race. Her additional interdisciplinary research interests include: history of agriculture, technology, and industry; biodiversity and genetic resources at national and global levels; and histories of Asian Americans in biology.

**Malini Sur** is a postdoctoral fellow at the Asia Research Institute, National University of Singapore. Her research interests connect three broad areas—borders, mobility, and citizenship—with a focus on South Asia. She has lectured at the University of Amsterdam and held a writing fellowship at the University of Toronto. Malini has published in anthropology and interdisciplinary journals including *HAU*, *Mobilities*, *Indian Journal of Gender Studies* and the *Economic and Political Weekly*. She has co-edited a collection of ethnographic essays on migration entitled *Transnational Flows and Permissive Polities* (with B. Kalir, Amsterdam University Press, 2012). At the Asia Research Institute, Malini is revising her doctoral dissertation (2012) on land politics and violence along South Asia's northeastern borderlands into a book manuscript. Photographs from her fieldwork have been exhibited in Amsterdam, Berlin, Bonn, Chiang Mai, Heidelberg, Kathmandu and Munich.

**Michelle Ann Miller** is a Senior Research Fellow in the Asian Urbanisms Cluster at the Asia Research Institute, National University of Singapore. She previously taught in the Masters of International and Community Development program at Deakin University and on subjects related to participatory approaches to development at Charles Darwin University. Her PhD from Charles Darwin University is in the field of political science and she is the recipient of that university's Speaker Prize in Politics. She has been principal investigator or collaborator on numerous grants that have centered on themes such as urban governance, decentralization, minority rights, conflict resolution and local development. Dr Miller has conducted research in Indonesia for fifteen years, focusing particularly on Indonesia's westernmost province of Aceh. Her current research investigates the role of decentralized urban governance in preparing for, responding to and recovering from environmental disasters. She has authored, edited or co-edited a number of books including: *Rebellion and Reform in Indonesia: Jakarta's Security and Autonomy Policies in Aceh* (Routledge, 2009); *Autonomy and Armed Separatism in South and Southeast Asia* (ISEAS, 2012); *Ethnic and Racial Minorities in Asia: Inclusion or Exclusion*? (Routledge, 2012); and (with Tim Bunnell) *Asian Cities in an Era of Decentralisation* (Routledge, 2014). **Mike Douglass** is Professor and Leader of the Asian Urbanisms Cluster at the Asia Research Institute and also Professor at the Lee Kuan Yew School of Public Policy at the National University of Singapore. He received his PhD in Urban Planning from University of California, Los Angeles (UCLA). He is Emeritus Professor, former Chair of the Department of Urban and Regional Planning and former Director of the Globalization Research Center at the University of Hawai'i. He previously taught at the Institute of Social Studies (Netherlands) and at the School of Development Studies, University of East Anglia (UK). He has been a Visiting Scholar/Professor at Stanford University, UCLA, Tokyo University, Thammasat University and the National University of Singapore. With a professional focus on urban and regional planning in Asia, he has lived and worked for many years in Asia both as an academic and as a staff of the United Nations. He has also advised university programs on planning education in Asia and the U.S. His current research focuses on globalization and livable cities, creative communities, disaster governance, and global migration.

**Rita Padawangi** was previously a researcher at the Lee Kuan Yew School of Public Policy, National University of Singapore. She has also been a Research Fellow at the Global Asia Institute, National University of Singapore; Center for Urban Research and Learning at Loyola University Chicago; and Centre for Strategic and International Studies in Jakarta, Indonesia. She has taught at the School of Design and Environment at the National University of Singapore and at the Department of Sociology at Loyola University Chicago, with a special focus on urban sociology and the sociology of the built environment. She received her PhD in Sociology from Loyola University Chicago where she was also a Fulbright Scholar for her M.A. studies. She holds a Bachelor of Architecture degree from the Parahyangan Catholic University and was a practicing architect in Bandung, Indonesia. With research interests spanning over the sociology of architecture and participatory urban development, Dr Padawangi has conducted various research projects in particularly Southeast Asian cities, including in Indonesia, the Philippines, Singapore, Malaysia, and Myanmar. She has been engaged as consultant for projects under major international development funding agencies. Her commitment to social activism in the built environment keeps her connected with community groups and practitioners in many cities in the region.