



CENTRE FOR THE HUMANITIES AND MEDICINE
THE UNIVERSITY OF HONG KONG

Histories and Ecologies of Health

13 - 14 December 2018

Disease and health are increasingly understood in relation to complex human, environmental, and inter-species interactions. *Histories and Ecologies of Health* seeks to explore this human non-human entanglement, tracing histories of ecological thought to show how conceptualizations of 'ecology' have shaped scientific, medical, and health practices – and more broadly, the management of 'nature.' Drawing on case studies from East and Southeast Asia to Central America, participants consider the expanding and contracting temporal and spatial scales of competing ecological imaginaries. They reflect on the political and technological forces that determine where ecological borders get drawn and how risks are defined. And they ask: under what conditions do ecologies become visible?

Programme

DAY ONE: Thursday 13 December 2018

CPD 2.58, 2/F The Jockey Club Tower
Centennial Campus, The University of Hong Kong

9:15 – 9:30 **Registration**

9:30 – 9:45 **Welcome and Opening Remarks: Everywhere Ecologies**
Robert Peckham (Centre for the Humanities and Medicine, HKU)

9:45 – 10:30 **Opening Plenary: Population in Histories and Ecologies of Health**
Alison Bashford (University of New South Wales)

Coffee/Tea Interval

10:45 – 12:45 **Session 01: Pre-emption, Conservation, Global Health**
Chair: Roberto Bruzzone (School of Public Health, HKU)

Global Health and the Ecologies of Conservation: Museums of Virology, Ornithology, and Anthropology as Avian Reservoirs
Frédéric Keck (CNRS, Paris)

Ecologies in the Age of the World Target: Towards a History of the Hotspot
Robert Peckham (Centre for the Humanities and Medicine, HKU)

The Flaming Moth: Human Ecology's Histories and Futures
James Dunk (University of Sydney)

Environmental Change and the Politics of Pre-emption: Reconsidering Environmental Histories of South Asia in the Anthropocene
Rohan D'Souza (University of Kyoto)

12:45 – 13:45 Lunch Break

14:00 – 15:30 **Session 02: Life Support & Rejuvenation**
Chair: Priscilla Song (Centre for the Humanities and Medicine, HKU)

Infrastructures of Life Support on Nicaraguan Sugar Plantations
Alex M. Nading (Brown University)

History and Ecology of Marine Biological Research in Early Twentieth-Century China: Hydras, Medusas, and More
Christine Y. L. Luk (Hong Kong Institute for the Humanities and Social Sciences, HKU)

Edgy Ecologies: Forests, Surveillance, and Zoonotic Malaria in Malaysia
Ria Sinha (Centre for the Humanities and Medicine, University of Hong Kong)

15:30 – 16:30 **Day One Discussion**

DAY TWO: Friday 14 December 2018

CPD 2.58, 2/F The Jockey Club Tower
Centennial Campus, The University of Hong Kong

9:30 – 10:30 **Session 03: Political Ecologies of Disease**

Chair: Maurits Meerwijk (Centre for the Humanities and Medicine, HKU)

Genba and the Politics of Hazard Exposure

Harry Yi-Jui Wu (Medical Humanities and Ethics Unit, HKU)

Exclusion Zones: Poverty, Social Marginalization, and the Thwarting of Polio Eradication

Thomas Abraham (Journalism and Media Studies Centre, HKU)

Coffee/Tea Interval

11:00 – 11:45 **Closing Plenary: Global Health in the Anthropocene? The History of (and History in) Planetary Health**

Warwick Anderson (University of Sydney/Harvard University)

12:00 – 12:45 **Roundtable Discussion**

Conference participants and invited guests

Plenary Speakers

Warwick Anderson

Warwick Anderson, M.D., Ph.D., is Janet Dora Hine Professor of Politics, Governance, and Ethics in the Department of History and the Charles Perkins Centre at the University of Sydney. In 2018-19, he is also Gough Whitlam and Malcolm Fraser Chair of Australian Studies in the Department of History of Science at Harvard University. The author of four prize-winning books in the history of modern science and medicine—including most recently (with Ian R. Mackay) *Intolerant Bodies: A Short History of Autoimmunity* (2014)—he is completing a monograph on the history of twentieth-century disease ecology.

Alison Bashford

Alison Bashford is Research Professor at UNSW-Sydney. Previously she was Vere Harmsworth Professor of Imperial and Naval History at Cambridge University. She is currently writing a book on the Huxley dynasty, based on the Wiles Lectures which she delivered in 2018 at the Queen's University, Belfast.

Panelists and Discussants

Thomas Abraham is the author of *Polio: The Odyssey of Eradication* (Hurst, 2018) and *Twentieth-Century Plague: The Story of SARS* (Hong Kong University Press, 2005). He is an Honorary Associate Professor in the Journalism and Media Studies Centre at the University of Hong Kong and has also worked at the World Health Organization in Geneva. Prior to that he was a journalist for nearly three decades in India, Europe and Hong Kong, where he was Editor of the *South China Morning Post*.

Roberto Bruzzone is a cell biologist who studied medicine at the University La Sapienza in Rome. After working at the University of Geneva and Harvard Medical School, he joined the Institut Pasteur in 1995. He is currently Professor in the School of Public Health and co-Director of the HKU-Pasteur Research Pole at the University of Hong Kong.

Rohan D'Souza is Associate Professor at the Graduate School of Asian and African Area Studies at Kyoto University. He is the author of *Drowned and Dammed: Colonial Capitalism and Flood control in Eastern India* (Oxford University Press, 2006) and joint editor of *The British Empire and the Natural World: Environmental Encounters in South Asia* (Oxford University Press, 2011). He has also edited *Environment, Technology and Development: Critical and Subversive Essays* (2012) for the Economic and Political Weekly Series. His research interests and publications cover themes in environmental history, political ecology, sustainable development, and modern technology.

James Dunk is a Research Fellow in the Department of History at the University of Sydney. He is a historian of health and medicine, with interest in the politics of mental illness and colonial formations of health. He has co-edited special issues in *Rethinking History* and *Health and History*, and his book, *Bedlam at Botany Bay*, will be published by NewSouth in 2019. He is a regular contributor to *Australian Book Review*.

Frédéric Keck is Director of Research at the Laboratory of Social Anthropology (CNRS-Collège de France-EHESS). Since studying philosophy at the Ecole Normale Supérieure in Paris and anthropology at UC Berkeley, he has been researching the history of social anthropology and contemporary biopolitical questions raised by avian influenza. He was Director of the Research Department of the Musée du Quai Branly between 2014 and 2018. He is the author of *Claude Lévi-Strauss, une introduction* (Pocket-La découverte, 2005), *Lucien Lévy-Bruhl, entre philosophie et anthropologie* (CNRS Editions, 2008), and *Un monde grippé* (Flammarion, 2010). He has co-edited (with N. Vialles) *Des hommes malades des animaux* (L'Herne, 2012) and (with A. Lakoff) 'Sentinel devices,' *Limn*, 2013. He received the bronze medal of the CNRS in 2012.

Christine Y. L. Luk is a Postdoctoral Fellow at the Hong Kong Institute for the Humanities and Social Sciences (HKIHSS) and the School of Modern Languages and Cultures (China Studies) at the University of Hong Kong. Author of *A History of Biophysics in Contemporary China* (Springer, 2015), her research interests revolve around the history, philosophy, sociology, and anthropology of biology and biotech in modern China and Hong Kong. Her research has appeared in the *Journal of the History of Biology, East Asian Science, Technology, and Society: An International Journal, Engineering Studies, and History and Philosophy of the Life Sciences*. This paper is part of her second book project on the history of marine biology in modern China. Part of the research outcome of this project will be published in a forthcoming chapter entitled 'The First Marine Biological Station in Modern China: Amoy University and the Amphioxus' in a co-edited volume, *From the Beach to the Bench: Why Marine Biological Studies*, to be published by the University of Chicago Press.

Maurits Meerwijk is an Affiliate Research Associate at the Centre for the Humanities and Medicine at the University of Hong Kong. After completing his doctoral thesis on the history of dengue fever in Asia in the Department of History at HKU, he worked as a Research Associate on the ERC-funded project *Visual Representations of the Third Plague Pandemic* at the University of St. Andrews, where his research focused on the history of plague in the Dutch East Indies. His wider research interests lie at the intersection of health and environment in Asia, with a strong focus on vector-borne disease, human/animal relations, and visual representations.

Alex M. Nading is Senior Fellow at the Watson Institute for International and Public Affairs at Brown University. He is an anthropologist who specializes in the critical study of health, medicine, and the environment in the Americas, and his book *Mosquito Trails: Ecology, Health, and the Politics of Entanglement* was published in 2014 by the University of California Press.

Robert Peckham is Professor and Chairperson of History and Director of the Centre for the Humanities and Medicine at the University of Hong Kong.

Ria Sinha is Senior Research Fellow in the Centre for the Humanities and Medicine at the University of Hong Kong. Her research interests focus on socioecological issues that perpetuate vector-borne diseases in Asia and the integration of automated technologies into infectious disease research and response. Dr. Sinha is a parasitologist by training and earned her Ph.D. from Imperial College, London, in collaboration with the Malaria Research Group at Leiden University's Medical Centre (LUMC) in the Netherlands. Her papers have been published in academic journals including *The EMBO Journal, Geoforum, and Global Public Health*, and she is currently completing a monograph on the history of malaria in Hong Kong.

Priscilla Song is Assistant Professor in the Centre for the Humanities and Medicine and the Department of History at HKU. She is a medical anthropologist working at the nexus of global health, science and technology studies, and China studies. Her research focuses on the social and ethical aspects of transnational biomedical technologies in urban China. Her book *Biomedical*

Odysseys: Fetal Cell Experiments from Cyberspace to China (Princeton University Press 2017) was awarded the 2018 Francis Hsu Book Prize from the American Anthropological Association.

Harry Yi-Jui Wu studied medicine in Taiwan and history in the UK. He is now Assistant Professor and Director of the Medical Humanities and Ethics Unit in the Li Ka Shing Faculty of Medicine at the University of Hong Kong, where he coordinates several modules related to medical humanities and medical history. His current projects include the development of global mental health, the transformation of end-of-life care, the politics of chronic diseases, and narrative medicine.

Plenary Presentations

Global Health in the Anthropocene? The History of (and History in) Planetary Health

Warwick Anderson

University of Sydney/Harvard University

In the twenty-first century it has become clear that the health of human and other animal populations is inextricably linked to the health of the planet. With the support of the *Lancet* and international philanthropic foundations, this formulation of 'planetary health' has begun to infiltrate schools of public health and erupt in public discourse. But this is not the first time that human disease has been connected to environmental degradation and climatic conditions. I want to explore here the relations of twentieth-century medical geography, disease ecology, and planetary thinking to emergent planetary health. Such a critical genealogy helps to clarify the differences in method, scope, and span between planetary health, as it might become, and competitors such as global health, EcoHealth, and OneHealth. In thus mapping the incipient conceptual terrain, we need to reflect not only on histories *of* planetary health, but also on history *in* planetary health.

Population in Histories and Ecologies of Health

Alison Bashford

University of New South Wales

How do we think about population in histories and ecologies of health? Both 'health' and 'ecology,' after all, are phenomena in which fertility and mortality are key determinants. Populations of micro-organisms and populations of humans have been conceptualised in ecological thought in terms of limited spaces. This paper tracks a history of ecological thought over the nineteenth and twentieth-centuries, examining how population and health have been brought together within it, at what scales, and to what effect.

Session Presentations

Exclusion Zones: Poverty, Social Marginalization and the Thwarting of Polio Eradication

Thomas Abraham

Journalism and Media Studies Centre, HKU

Albert Sabin's oral polio vaccine worked miraculously in clearing polio from large parts of the globe and brought the dream of eradicating polio close to realisation. But the persistence of polio in Pakistan and Afghanistan, and the long struggle to eliminate polio from the Indian states of Uttar Pradesh and Bihar has shown how poverty, crowded living conditions, a lack of clean water and sanitation, combined with social exclusion created an environment that neutralized the biological power of the polio vaccine.

Environmental and social conditions are rarely taken into consideration when global eradication campaigns are launched. Eradicators focus attention on tools, whether vaccines, or insecticides like DDT, which was used in the failed attempt to eradicate malaria. They rarely pay attention to social, cultural and environmental conditions in which these tools are used. Using the experience of polio as well as earlier eradication campaigns, this paper explores the

consequences of failing to understand the wider environment in which eradication campaigns operate.

The Flaming Moth: Human Ecology's Histories and Futures

James Dunk

University of Sydney

The Anthropocene produces ever more despairing calls for the humanities, human sciences, and physical sciences to pool methodology and findings to address the many-faceted planetary problems arising from human activity. Central to Anthropocene studies is the need to revisit the boundary between the human species and its environment. The Human Ecology Group established at Australian National University in 1965, an early trans-disciplinary endeavour preoccupied with this boundary, struggled to simultaneously define and address problems of daunting scale and implication. Health became the organising principle of the 'biohistory' developed by the group, and the future was the narrative device for the diagnosis. This paper revisits the biological logic of human ecology in the implacable futurism of the Anthropocene.

Global Health and the Ecologies of Conservation: Museums of Virology, Ornithology and Anthropology as Avian Reservoirs

Frédéric Keck

CNRS-Collège de France-EHESS

This paper asks what it means to do an anthropology of avian influenza at the beginning of the twenty-first century by looking at a longer genealogy of virology, ornithology and anthropology over the last two centuries. To explain how a social anthropologist can meet 'virus hunters' and birdwatchers in Hong Kong, it looks at the practices of collecting and conserving among these three professions, investigating places where information about natural and cultural diversity is available, such as reserves, laboratories, and museums. It thus sheds light on the concept of 'avian reservoirs' as sites where viruses reveal the diversities of birds, blurring the boundaries between 'global health' and 'global art.' It also asks questions about the place of China in this global view of diversity under threat of mass extinction.

History and Ecology of Marine Biological Research in Early Twentieth-Century China: Hydras, Medusas, and More

Christine Y. L. Luk

Hong Kong Institute for the Humanities and Social Sciences, HKU

This paper explores the state of ecological knowledge in marine biological studies in twentieth-century China. Through examining a number of texts in the Chinese-language journal *Bowuxue zazhi* (Journal of Natural History), this paper suggests that Chinese intellectuals in the early twentieth century were actively pursuing marine biological research. The discovery of Chinese freshwater jellyfish in the Yangtze River and the illustrated manuals for preparing hydra specimens are two examples of historical actors' efforts to examine the regenerative capacity of aquatic animals in the Chinese ecosystem. As one of the earliest publications in modern China that specialized in natural history (which includes both marine biology and field biology), *Bowuxue zazhi* contained reports of original research from China but also Chinese translations of research articles in leading English periodicals such as *The Biological Bulletin* published by the Marine Biological Laboratory (MBL) at Woods Hole, Massachusetts.

But the Chinese studies of hydras and medusas revealed more than just ecological knowledge alone. Just as regeneration is a widely shared phenomenon across many species, the

meaning of regeneration is also quite diverse and multi-valent. Surveying other regeneration-inspired texts in Republican China, one can discover that regeneration took on political meanings associated with national renaissance and revitalization, broadly conceived. Discussion of regeneration took place in the context of early twentieth-century China where scientific issues were often inseparable from thorny political issues such as nationalism. As much as the Chinese displayed interests in regeneration research in the early twentieth century, they were equally if not more interested in ideas about regeneration outside biology.

Infrastructures of Life Support on Nicaraguan Sugar Plantations

Alex M. Nading

Brown University

Irrigation dams are essential to sustaining Nicaragua's vast sugarcane monoculture, but they are also important to human survival. Over more than a century of cane cultivation, the water channelled by dams has become essential to household reproduction among plantation laborers and their families. Amid a recent epidemic of chronic kidney disease among plantation workers, dialysis has become indispensable to keeping many plantation residents alive. Workers' reliance on dams and dialysis is not a case of capitalist infrastructure overdetermining the course of their lives. Instead, as I argue, the notion of 'life support' highlights the mutual fragility of industrial ecologies and working bodies.

Ecologies in the Age of the World Target: Towards a History of the Hotspot

Robert Peckham

Centre for the Humanities and Medicine, HKU

What can the migration of a word across domains—from ecology and conservation to epidemiology and epidemic management—tell us about the forces that shape scientific knowledge and practice? Focusing on Southeast Asia, and in particular Indonesia, this paper explores the hotspot's contradictory history as an exemplary but exceptional space: from a zone of extraordinary biodiversity in the 1980s to a locale that poses heightened risk from emerging infectious diseases today. The paper investigates the different practices of conservation, protection, and surveillance that the hotspot calls forth. It argues that tracing the hotspot's conceptual evolution sheds light on an underlying tension within contemporary ecological thought between the world as system and the world as target.

Edgy Ecologies: Forests, Surveillance and Zoonotic Malaria in Malaysia

Ria Sinha

Centre for the Humanities and Medicine, HKU

The ecology of malaria in Southeast Asia is evolving, driven by intersecting natural and anthropogenic factors that are generating new routes of vector-borne disease transmission. This paper examines how state, private, and public activities occurring at the edge of Malaysian rainforests are implicated in the dynamics of zoonotic malaria transmission. While epidemiological studies emphasize the links between primary forest clearance and malaria incidence, there has been less consideration of this 'contact zone' ecology that borders and connects human settlements and forest. Finally, the paper considers how and with what consequences novel technologies, such as remote sensing, are being mobilized in these borderlands as a means of bypassing ecological complexity.

Environmental Change and the Politics of Pre-emption: Reconsidering Environmental Histories of South Asia in the Anthropocene

Rohan D'Souza

Kyoto University

As a genre, environmental histories of South Asia have been largely occupied by efforts to explain relationships between British Colonialism and ecological change. The first framework—widely referred to as the ‘colonial- watershed thesis’—claimed that British colonialism profoundly undermined the previous ecological harmony that characterized social organization in South Asia. In contrast, the ‘continuities-with-change’ advocates argued that while the ‘pace of change’ was undoubtedly ‘rapid and epochal’, radical environmental transitions were not entirely new to the Indian sub-continent. In effect, rather than treating British colonial impacts as the only and most decisive ecological encounter, the ‘continuities- with-change’ view underlined the need for long term histories about human-nature relationships in the subcontinent. Whilst these two dominant frameworks have over the years duelled, debated and generated a rich and productive scholarship, recent concerns about global warming and anxieties about climate change are urging us to reconsider whether conventional plot lines for environmental histories on South Asia are possible.

In particular, I discuss how ideas about the ‘Anthropocene’ have begun to unsettle some of the conceptual givens in South Asian environmental history writing. Notably, with concepts such as the ‘Great Acceleration’ and the Earth Systems Sciences, the orientation and efforts now are to reconsider periodization in term of carbon concentrations in the atmosphere and to emphasise threats and alarms at the planetary scale. Will saving the planet require us to now obscure and side step local and regional histories about South Asia’s experience with colonial resource extraction and environmental changes brought on by European modernity? A second, but equally telling challenge, is what Haraway terms as the problem of ‘futurism’. Will the task of ‘saving the future’—by the unequal and forced institution of carbon forests (REDD programmes) and other regimes that define carbon access—end up turning the present into a mere hostage of the future? Armed thus with notions about planetary scale and futurism in the Anthropocene, can writings on South Asian environmental history still survive the loss of the regional, the local and, above all else, the colonial in its narrative design?

***Genba* and the Politics of Hazard Exposure**

Harry Yi-Jui Wu

Medical Humanities and Ethics Unit, HKU

The concept of *genba*—a Japanese term meaning ‘the real place’—has recently been appropriated as a tool for exploring the sites “where knowledge of exposure to pollutants and their effects is not just produced but contested” (Onaga & Wu, 2018). In this presentation, I develop the *genba* concept further, reflecting on its potential as a new analytical tool for rethinking the interactions between environment and health, and the inter-dynamics of biological and social ecologies. In science, causal relations between exposure and effects are difficult to establish. Efforts to reconstruct the scenography of exposure through the collective activities of different professionals and laymen thus become essential in confirming the influence of hazards and even in identifying disease. As an analytical tool, *genba* foregrounds on site-specific conditions and provides a space for cross-disciplinary work. As such, it furnishes a useful framework within which scholars, including historians and ethnographers, may re-examine the role of social and professional networks in work-place hazard and environmental pollution incidents, as well as the levels of agency among different actors within these networks.