# ENVIRONMENTAL HUMANITAL IN THE PHILIPPINES AND SOUTHEAST ASIA

An International Conference

28 April 2025 Pilar Herrera Lecture Hall University of the Philippines Diliman

29 April 2025 Escaler Hall, Science Education Complex Ateneo de Manila University





# Jointly organized by

Department of History, University of the Philippines Diliman Department of History, Ateneo de Manila University Department of History, National University of Singapore

# With support from

College of Social Sciences and Philosophy & the Philippine Learning Center for Environment and Social Sustainability -University of the Philippines Diliman

Rosita G. Leong School of Social Sciences & the Office of University Partnerships and Internationalization -Ateneo de Manila University

# **CONFERENCE ABSTRACT**

In recent years, the field of environmental humanities has emerged to provide new, interdisciplinary perspectives to the planetary crisis. In the process, it has contributed to a robust reexamination of human-nature relationships and the multispecies histories that enliven them. In Southeast Asia, the rise of environmental humanities has cultivated new research questions, fresh analytical approaches, and novel partnerships for students, scholars, and other engaged communities in the region and beyond. What is more, the field of what we might call "Southeast Asian environmental humanities" has centered the region on its own terms—historically, ecologically, linguistically, culturally, and scientifically. While the field has narrated the conversions of forests into plantations, rivers into canals, and mountains into mines, it has likewise storied the ways in which Southeast Asian natures have become biodiversity hotspots—hotspots of extinction, endangerment and extirpation but also of endemism, conservation and heritage.

This conference brings together the humanities and the sciences to offer context and discussion to the many issues and questions relevant to understanding the changing natural world in the Philippines and Southeast Asia. The twenty-four paper presentations aim to foster conversations that focus on the environment through the exploration of new ideas, sources, and voices. They see an opportunity to share, learn, and come to know the nuance of species, cultures, and ecosystems across the Philippines and Southeast Asia. In doing so, we hope to surface histories of the past and present that examine 'nature-making' as multiscalar and multilingual while emphasizing, too, the value of vernacular knowledge production coupled with the vantage of on-the-ground narratives and experiences. Through the promise of community and interdisciplinarity, our conference seeks to forge collaborative and information-driven insights about the urgency and complexity of the field of environmental humanities and its growing relevance to scholars, students, and the multiple publics in the Philippines and Southeast Asia.

### CONVENERS

#### **Ruel V. Pagunsan**

Department of History, University of the Philippines Diliman

#### Patricia Irene N. Dacudao

Department of History, Ateneo de Manila University

#### Anthony D. Medrano

Department of History, National University of Singapore

# SCHEDULE SUMMARY

Date	Time	Panel Session
28 April	9:00–9:20 a.m.	Introductory Remarks
	9:20–10:40 a.m.	Panel 1: Coasts, Lakes and Reclamations
	10:55 a.m.–12:15 p.m.	Panel 2: Entomology and Society
	1:35–2:55 p.m.	Panel 3: Local Ecologies and Vernacular Practices
	3:10–4:30 p.m.	Panel 4: Animals, Institutions and Conservation
	4:30 p.m.	UPD campus tour
	6:30 p.m.	Conference dinner for paper presenters, panel chairpersons and invited guests
29 April	9:00–9:20 a.m.	Introductory Remarks
	9:20–10:40 a.m.	Panel 5: Hazards and Climate
	10:55 a.m.–12:15 p.m.	Panel 6: Plants and Global Mobility
	1:35 –2:55 p.m.	Panel 7: Ecological Changes and Local Responses
	3:10–4:30 p.m.	Panel 8: Marginalized Spaces and Environmental Voices
	4:30 p.m.	Closing Remarks
30 April	6:30-8:30 a.m.	Ateneo Wild Nature Walk (limited slots only)
	9:00-11:-00 a.m.	Manila Observatory Tour (limited slots only)

# DAY 1 | 28 April 2025 (Monday) Pilar Herrera Lecture Hall University of the Philippines Diliman

8:30-9:00 a.m.	Registration		
9:00-9:20 a.m.	Introductory Remarks Edgardo Carlo L. Vistan II Chancellor, University of the Philippines Diliman		
9.00–9.20 a.m. [20 mins]	Ruth R. Lusterio-Rico Dean, College of Social Sciences and Philosophy, University of the Philippines Diliman Patricia Irene N. Dacudao Conference Co-convener Ateneo de Manila University		
<b>Panel 1: Coasts, Lakes and Reclamations</b> Chairperson: Ruth R. Lusterio-Rico   University of the Philippines Diliman			
9:20–10:40 a.m. [1 hour and 20 mins]	Transforming urban natures on the edge: Temporalities of land reclamation in Manila Bay Kristian Karlo C. Saguin   University of the Philippines Diliman The future of 'Wallace's Dreamponds': Novel configurations of conservation practice in Sulawesi's ancient lakes Jonathan Galka   Harvard University/NUS Asia Research Institute Mga kwento sa hibasanan (Stories from hibasanan): Local ecological knowledge reveals threats to coastal gleaning systems Dawn Iva P. Satumbaga, Justine Nicole Torres, Cherie Audrey Alfiler, Raymond Rodolfo   Ateneo de Manila University		
10:40–10:55 a.m. [15 mins]	Break		
<b>Panel 2: Entomology and Society</b> Chairperson: Ma. Florina Orillos-Juan   De La Salle University Manila			
10:55 a.m.–12:15 p.m. [1 hour and 20 mins]	Recapturing the lightEunice Jingmei Tan   National University of SingaporeRaden Soesilo and the making of malaria ecology in Indonesia, 1925-1943Anthony D. Medrano   National University of SingaporeMarvelous insects, injurious insects: Leopoldo Uichanco and the practices of Philippine entomology Ruel V. Pagunsan   University of the Philippines Diliman		

10:55 a.m.–12:15 p.m. [1 hour and 20 mins]	Lunch	
<b>Panel 3: Local Ecologies and Vernacular Practices</b> Chairperson: Peter Schoppert   National University of Singapore Press		
1:35–2:55 p.m. [1 hour and 20 mins]	Marking the land: Mapping, resistance, and environmental memory in the 1745 Tagalog revolts Ros C. Costelo   University of the Philippines Diliman Plants to heal the lovesick in the Malay world Faizah Zakaria   National University of Singapore Sero worlds: Shifting livelihoods and spatial orientations in Kupang Bay Gillian Bogart  University of California Santa Cruz	
2:55–3:10 p.m. [15 mins]	Break	
Panel 4: Animals, Institutions and Conservation Chairperson: Maria Mangahas   University of the Philippines Diliman		
3:10–4:30 p.m. [1 hour and 20 mins]	<ul> <li>Alvin Seale, the USFC Albatross, and the beginning of insular fish science in the Philippine Islands, 1907-1910</li> <li>Brian Paul Giron   Ateneo de Manila University</li> <li>Bienvenido M. Gonzalez and the advancement of animal husbandry in the Philippines</li> <li>April Hope T. Castro   University of the Philippines Los Baños</li> <li>Mudskippers as conservation emblems for mangrove parks</li> <li>Zeehan Jaafar   National University of Singapore</li> <li>Kathy Poh   NUS Lee Kong Chian Natural History Museum</li> </ul>	
4:30 p.m.	Group Photo	

Day 2 | 29 April 2025 (Tuesday) Escaler Hall, Science Education Complex Ateneo de Manila University

8:30-9:00 a.m.	Registration	
9:00–9:20 a.m. [20 mins]	Introductory Remarks Czarina Saloma-Akpedonu Dean, Rosita G. Leong School of Social Sciences, Ateneo de Manila University Ruel V. Pagunsan Conference Co-convener University of the Philippines Diliman	
<b>Panel 5: Hazards and Climate</b> Chairperson: Alfred F. Pawlik   Ateneo de Manila University		
9:20–10:40 a.m. [1 hour and 20 mins]	Risk and social transformation: Commercialization, land use, and disasters in Nueva Ecija, 1880s-1910s Diego F. Rebato, Jr.   Ateneo de Manila University Producing seismological and vulcanological knowledge: Scientific studies on earthquakes and volcanic eruptions in the Philippines, 1850s-1990s Kerby C. Alvarez   University of the Philippines Diliman Interrogating environmental justice in Asian cities: Locally-led climate adaptation for building community resilience Emma E. Porio   Ateneo de Manila University	
10:40–10:55 a.m. [15 mins]	Break	
<b>Panel 6: Plants and Global Mobility</b> Chairperson: Francis A. Gealogo   Ateneo de Manila University		
10:55 a.m.– 12:15 p.m. [1 hour and 20 mins]	<ul> <li>Tracing tobacco: The movement of American plant from New Spain to the Philippines</li> <li>Mario Alberto Roa   El Colegio de México</li> <li>Floral imperialism: The water hyacinth (Pontederia crassipes) in Southeast Asia</li> <li>Timothy P. Barnard   National University of Singapore</li> <li>From indigenous Philippine plant to global commodity: Towards an environmental history of abaca</li> <li>Patricia Irene N. Dacudao   Ateneo de Manila University</li> </ul>	
12:15–1: 35 p.m. [1 hour and 20 mins]	Lunch	

<b>Panel 7: Ecological Changes and Local Responses</b> Chairperson: Kristine Michelle Santos   Ateneo de Manila University			
1:35–2:55 p.m. [1 hour and 20 mins]	Development for what and for whom? Urbanization and vegetable farming in Baguio, 1899-1941 Marie Beatriz Gulinao and Alvin D. Cabalquinto   Ateneo de Manila University Porcinomania: Raising pigs and undoing revolution in urban north Vietnam, 1975–1986 Uyen Nguyen   National University of Singapore Landscapes of resistance and adaptation: The Aetas' response to the establishment of Subic Naval Base in Zambales, Philippines Janet S. Reguindin-Estella   University of the Philippines Diliman		
2:55–3:10 p.m. [15 mins]	Break		
<b>Panel 8: Marginalized Spaces and Environmental Voices</b> Chairperson: Francis M. Navarro   Ateneo de Manila University			
3:10–4:30 p.m. [1 hour and 20 mins]	"Wag ka anya magsamuk" (Don't be noisy): Silencescapes in Marinduque, 1916- 1974 Emmanuel Jayson V. Bolata   University of the Philippines Diliman Lakad, lapit (Walking, nearness): Reviving the habit of walking and rediscovering nearness on the way to ecological justice Remmon E. Barbaza   Ateneo de Manila University The dual temporalities of waste: Sewage surveillance and the Filipino migrants in pandemic Hong Kong Nicolo Paolo P. Ludovice   Hong Kong University of Science and Technology		
4:30 p.m.	Closing Remarks Anthony D. Medrano Conference Co-convener National University of Singapore Group Photo		

# Transforming urban natures on the edge: Temporalities of land reclamation in Manila Bay

# Kristian Karlo C. Saguin

#### Abstract

Contemporary coastal cities are retrofitting and reshaping their urban environments in anticipation of a future, climate-changed world. In Metro Manila, these processes have unfolded in a number of ways, including the construction of infrastructure networks to protect the city from flooding and the building of new cities from scratch through land reclamation projects. Land reclamation has been particularly transformative of coastal environments at the urban edge, the dynamic and amphibious interface where the land meets the sea. This presentation examines the temporal intersections of such anticipatory and speculative practices in the city with the trajectories of changing coastal environments through the case of land reclamation in Manila Bay. By juxtaposing imaginaries accompanying the rollout of these reclamation projects with urban dweller narratives of inhabiting a transforming coastal environment, it explores three dimensions of these intersections. First, the creative-destructive tension at the core of land reclamation produces different forms of precarious inhabitation at the urban edge amid uncertain climate futures. Second, the materiality of the land-sea nexus on the edge emerges as a vital matter in the eventual trajectories of these projects and inhabitation. Third, the timescapes at the land-sea nexus embody diverse temporalities of urban natures characterized by futurity, incompleteness and diverse rhythms. Together, these material and temporal dimensions present a lens to capture emerging environment-making processes in extending urban edges.

#### Bionote

Kristian Karlo C. Saguin is an Associate Professor of Geography at the University of the Philippines Diliman who has engaged with various political ecological dimensions of urban and environmental change in the Philippines. He is the author of the *Urban Ecologies on the Edge: Making Manila's Resource Frontier* (University of California Press, 2022), which received the Harry J. Benda Prize from the Association for Asian Studies and the Meridian Book Award for Outstanding Scholarly Work in Geography from the American Association of Geography.

# The future of 'Wallace's Dreamponds': Novel configurations of conservation practice in Sulawesi's ancient lakes

### Jonathan Galka

#### Abstract

There is change afoot in Central Sulawesi's ancient lakes. These five lakes and their drainages are home to several spectacular evolutionary radiations: mollusks of the genus Tylomelania, shrimp of the genus Caridina, and Telmatherinid silversides. But today, as the group Sulawesi Keepers implores, much of the "freshwater fauna of Sulawesi is at risk of extinction." Dam projects at Lakes Poso and Towuti, habitat fragmentation, the introduction of nonnative fish species, increased siltation resulting from nearby deforestation, and the as-yet incompletely known effects of increasing nickel mining have all degraded lake habitats. Sulawesi Keepers, a group based in continental Europe and coordinated by Ostrava Zoo in Czech Republic, seeks to combat these threats via a multi-pronged approach. In Europe, they appeal to long-standing efforts among aquarium hobbyists to help build and network insurance populations of endangered mollusks, shrimp, and fish at home. They have identified flowerhorn cichlids, first introduced into Lake Matano and spreading therefrom, as a primary threat to remaining invertebrate biodiversity. In Sulawesi they work with local partners including the Institut Mosintuwu as well as, perhaps surprisingly, nickel mining operations, to raise awareness of the effects of the flowerhorn, monitor introductions, and potentially build predator exclusion zones. This talk focuses on these forms of conservation practice emerging between tank craft in Europe, nickel mining's interest in in *situ* interventions, and the local communities bordering Sulawesi's ancient lakes.

#### Bionote

Jonathan Galka is a Postdoctoral Fellow in the Science, Technology and Society cluster of the Asia Research Institute at the National University of Singapore. He earned his PhD in the Department of the History of Science at Harvard University in 2025. His first book project documents a history of the modern ocean conditioned by mid-century aspirations to mine the very deep seabed for mineral ores. At NUS, he is beginning a new historical and ethnographic project concerned with the history and future of efforts to bring deep seawater onto land for the production of energy, food, and artificial cold. Writing on these topics appears in *Social Studies of Science, Historical Studies in the Natural Sciences*, and *History and Philosophy of the Life Sciences*. He maintains a long-term interest in mollusk-human histories. Work on this topic appears in *Journal of the History of Biology* and *Island Studies Journal*.

# Mga kwento sa hibasanan (Stories from hibasanan): Local ecological knowledge reveals threats to coastal gleaning systems

# Dawn Iva P. Satumbaga, Justine Nicole Torres, Cherie Audrey Alfiler, and Raymond Rodolfo

#### Abstract

Coastal gleaning refers to the practice of gathering invertebrates, such as shellfish, from intertidal waters during the low tide. It is a form of small-scale wild fisheries that is largely undocumented and unmonitored despite being widely reported across coastal communities in tropical to subtropical regions.

The nature of this activity necessitates a deep awareness of the natural environment and its processes. Because of this, local ecological knowledge (LEK) has developed around tides, weather patterns, biodiversity and other environmental processes, and has thus changed in response to changing environments. Gleaning has also informed local material culture, such as cuisine, tools and equipment, and social relationships among neighbors and family members. Because of this intimate and co-evolutionary connection between the environment and the culture of coastal communities, the latter also develop keen senses in detecting—and responding—to perceived threats and changes.

Based on preliminary qualitative data gathered from gleaners in Sitio Daungan Pari, Pagbilao, Quezon, this paper aims to highlight how LEK can identify not only the ecological threats to coastal ecosystems and livelihoods, but also how communities prioritize, interpret, and respond to these perceived threats. Through the use of LEK in identifying environmental issues, research and knowledge creation are grounded in socially relevant contexts.

#### Bionote

Dawn Satumbaga is a PhD candidate at the Institute of Environmental Science and Management in UP Diliman and a faculty member of the Department of Environmental Science in Ateneo de Manila University. Her current project focuses on coastal gleaning practices in Pagbilao Bay, Quezon. Her other concurrent projects focus on socialecological relationships and coastal ecosystems, including temporal investigations of gleaning through archaeological comparatives in Palawan, and blue carbon restoration mapping. Through her work, Ms. Satumbaga advocates for socially-relevant scientific practice and engagement, especially in underserved coastal communities.

# **Recapturing the light**

# Eunice Jingmei Tan

#### Abstract

Bioluminescent fireflies, with their enchanting lights, have long symbolized hope, wonder, and cultural significance across societies. Historical accounts from Southeast Asia celebrate their beauty, from poetic descriptions of "earth-born stars" in 19thcentury Britain to travellers' vivid depictions of glittering fireflies illuminating forests in Malaysia. However, rapid urbanization in Singapore has led to the loss of over 95% of its vegetation, pushing many firefly species to extinction. Fireflies, intricately woven into art, folklore, and religious beliefs, continue to captivate human imagination, inspiring sustainable innovations such as bioluminescent plants and molecular tools like luciferase for biomedical research. Bioluminescence in fireflies evolved initially in larvae, likely as an aposematic display against predators. Today, fireflies face threats from habitat destruction, light pollution, and pesticide use. Yet, conservation efforts, such as preserving mangroves and promoting ecotourism through synchronized firefly displays, highlight their potential as ambassadors for biodiversity. In urbanized Singapore, pockets of fireflies, such as those on Pulau Ubin, offer hope for coexistence between development and nature. Firefly conservation is a poignant reminder of the urgent need to balance urban growth with biodiversity protection. As Singapore represents the densely urbanized future of Southeast Asia, conserving fireflies symbolizes a broader commitment to sustainable living and preserving the region's unique ecosystems. Public engagement, green urban planning, and advocacy for natural habitats are critical for ensuring fireflies—and the wonder they inspire—remain part of our shared future.

#### Bionote

Eunice Jingmei Tan studies the behaviour and ecology of spiders and insects in Southeast Asia, China and Australia through a range of field and laboratory experiments. Eunice is currently an Assistant Professor at the National University of Singapore, Department of Biological Sciences. Eunice's research in arthropods aims to inform the management of forests and green spaces, to ensure that the vital ecosystem services that arthropods provide can continue.

# Raden Soesilo and the making of malaria ecology in Indonesia, 1925-1943

### Anthony D. Medrano

#### Abstract

In 1935, Raden Soesilo (1892-1943), who was the younger brother of Raden Soetomo (1888-1938), the founder of Boedi Oetomo (est. 1908), was on leave from his post as director of Indonesia's anti- malaria service. He was in Singapore, teaching a course on malaria ecology at the King Edward VII College of Medicine. Most of his students were doctors from Siam, Malaya, Burma, Indochina, and the Philippines. While their participation in Soesilo's course revealed the workings of collaboration in the interwar moment, it also spoke to how specific Anopheline mosquitoes—and the malarias they carried—cut across Southeast Asia, engendering not only a regional sense of belonging but also a common state of precarity.

This chapter uses the short but brilliant career of Soesilo, who died in a Banjermasin camp in 1943, to rethink a history of malaria ecology as a story of "Indonesian science" (Lowe 2008). With its intellectual origins in the early twentieth century, malaria ecology refers to a nuanced understanding of the habits and habitats of particular Anopheles species and the methods specific to their "assaineering" or sanitation (Mangkoewinoto 1923). Historiographically, the story of malaria ecology has been narrated through the work of Europeans such as Ross, Malcom, Swellengrebel, and Schuffner. And yet, local scientists like Soesilo were central to producing knowledge about malaria ecology in Indonesia—from identifying dangerous mosquito species and mapping their lifecycles to documenting the ways in which land use changes created the conditions for certain Anopheles to thrive, resulting in the prevalence of "man-made malaria" (Soesilo 1935). For Soesilo, "man-made malaria" stemmed from infrastructural interventions such as road-building, land- and mangrove- clearing, fish pond development, quarry excavations, and housing, canal, and irrigation schemes. This was a crucial turn in public health thinking because it centered not only the interactions between mosquitoes and humans but also the "edge effects" of their rapidly changing environments (Anderson 2018). Drawing on Soesilo's archive, the chapter recovers a history of "Indonesian science" through the rise and fall of malaria ecology in Southeast Asia.

#### Bionote

Anthony D. Medrano is the National University of Singapore (NUS) Presidential Young Professor of Environmental Studies at Yale-NUS College, and an assistant professor in the Department of History at the National University of Singapore. He also holds an appointment at the Lee Kong Chian Natural History Museum. His teaching and scholarship look at the histories of biodiversity research in Singapore and Southeast Asia. Medrano is the co-editor (with Eunice J. Tan and Tanisha Navqi) of *Wild Life: Stories of Singapore Biodiversity* (LKCNHM, 2025) and editor of *Lala-Land: Singapore's Seafood Heritage* (Epigram, 2024). He is completing a chapter titled "Seaweeds on the move, or stories of collection-building in nineteenth-century Singapore''' for Timothy P. Barnard's edited volume *Singaporean Plants* (NUS Press).

# Marvelous insects, injurious insects: Leopoldo Uichanco and the practices of Philippine entomology

### Ruel V. Pagunsan

#### Abstract

In the first half of the twentieth century, locust and malaria research had significantly shaped the scientific works on Philippine insects. Leopoldo Uichanco (1894-1972), regarded as the 'father of Philippine entomology,' was a pioneer Filipino scientist in this field. Along with Gonzalo Merino and Silverio Cendana, Uichanco carried out various country-wide pest control projects that advanced applied entomology in the Philippines. Their works inspired further investigations seeking to integrate insect research with the national programs of modernizing the country's crop production particularly in the aspect of rural agriculture. While it was in economic entomology that Uichanco's scientific contributions were widely recognized, his research in systematics, physiology and insect ecology were also noteworthy.

This chapter examines the relatively unexplored role of entomologists in the history of Philippine agriculture as well as in the foundational studies of local biodiversity. It delves into the practices and intellectual genealogies of entomological research that sees insects not just as injurious pests but also as equally marvelous creatures. Uichanco studied locusts and mosquitoes as well as cicadas, beetles, butterflies, termites and aphids. He practiced entomology as a scientist and a student of Philippine culture. Uichanco vernacularized entomology by understanding the ways in which the world of arthropods mattered to Filipinos: Why was insect ecology important in tropical house planning and construction? How did insects figure in Filipino landscape beliefs? In what ways insects became part of the local culinary culture? Through Uichanco's career and writings, the paper explores the interconnections between biological sciences and socio-cultural practices in the context of Philippines.

#### Bionote

Ruel V. Pagunsan is an Associate Professor at the Department of History, University of the Philippines Diliman. His research focuses on nature-making and nationalization of ecological spaces. He has a PhD in History from the National University of Singapore and published articles in journals such as the *Philippine Studies: Historical and Ethnographic Viewpoints* and the *Journal of Southeast Asian Studies*. Currently, he is working on a book project examining the environmental history of nation-building in the Philippines.

# Marking the land: Mapping, resistance, and environmental memory in the 1745 Tagalog revolts

### Ros C. Costelo

#### Abstract

This paper examines how 18th-century Tagalog communities utilized their knowledge of the environment to assert territorial claims and contest land boundaries. In the aftermath of the 1745 Tagalog revolts, Spanish colonial authorities conducted a process of *medición y amojonamiento de tierras*—a process of land measurement and boundary marking—intended to delineate contested territories between religious estates and native communities. Drawing on Muñoz Arbelaez's (2017) study of land policies in Nueva Granada, this paper situates Tagalog participation within broader colonial mechanisms of territorial control, such as the *composición de tierras*. However, rather than being passive subjects of colonial cartography, the natives actively shaped the mapping process by serving as local informants and guides. They identified rivers, streams, mountains, hills, native trees, and other landscape features that marked traditional boundaries. Using historical maps and litigation records, this study explores how mapping functioned both as a tool of colonial governance and as a means of indigenous resistance in 18th-century Philippines.

#### Bionote

Ros C. Costelo is an Assistant Professor at the University of the Philippines (UP), Department of History. She holds a Doctorado en Historia Contemporánea (*mención internacional*) and a Máster Interuniversitario en Historia Contemporánea from the Universidad Complutense de Madrid (UCM), under the supervision of María Dolores Elizalde. She also earned her BA in History (2007) and MA in History (2012) from the UP Department of History. Her research interests focus on the intersections of Spanish colonial public works and engineering, sanitation, and social control in the Philippines in the 18th and 19th centuries, as well as the techno-scientific networks and diplomatic history in the Spanish and British colonies in Asia during the 19th century.

# Plants to heal the lovesick in the Malay world

### Faizah Zakaria

#### Abstract

Despite being a significant part of early modern Malay medical manuscripts, love charms have generally been neglected in the study of Malay medicine and global folk traditions more broadly. Defined here as incantations, amulets and herbal decoctions that were aimed at arousing or recuperating feelings conducive to romantic and/or sexual relationships, such charms reflect a pathologizing of relationship dysfunctions that needs to be incorporated into a broader schematic of disease in traditional Malay medicine. Examining six early 19th century manuscripts from different parts of the Malay World, this paper asks – what were the symptoms of relationship dysfunction? How did they manifest themselves physically? What were commonly used ingredients in love charms? How did the ingredients reflect the harmonizing of social relationships with local environments? Here, I argue that understanding patterns in the use of love charms is instrumental in framing a social theory of disease in the Malay World that goes beyond conventional interpretations of humoral and Prophetic medicine. Rather, incorporating physical pain into a system of pathology reflects a de-centring of the individual body and a re-centring of social relationship when a body heals.

#### Bionote

Faizah Zakaria is an Assistant Professor in the Departments of Southeast Asian Studies and Malay Studies at the National University of Singapore. Her research interests centre on religion and ecology, environmental justice and indigenous movements in island Southeast Asia. Her first monograph *The Camphor Tree and the Elephant: Religion and Ecological Change in Maritime Southeast Asia* (2023) was published by the University of Washington Press. She is presently working on a research project on science and religion in volcanic eruptions and co-coordinates a digital humanities project on comparative Asian medicine. She received a PhD in history from Yale University in 2018.

# Sero worlds: Shifting livelihoods and spatial orientations in Kupang Bay

### Gillian Bogart

#### Abstract

Since the 19th century, coast dwellers in Kupang Bay, West Timor have used sero fish fences to make a livelihood. Constructed from locally sourced gewang palm leaves and mangrove wood, then staked in the bayland's tidal mud, sero is, more than a fishing technique, a vernacular infrastructure that demarcates territories within which groups of residents fish, forage, and make salt. Sero use in Kupang Bay, however, has steadily declined in recent decades. Today, many fishers instead toss nylon purse seine nets into coastal waters from sampan and small perahu. This paper thinks with sero worlds to consider how different technologies inform people's engagement with water and other elemental forces, as well as how, more broadly, these engagements influence coastal residents' spatial orientation. Pushing beyond a comparative mode, this paper aims to show how livelihood practices in the bay interact, variously supporting or undermining one another, to shape the coast.

#### Bionote

Gillian Bogart is a postdoctoral fellow at the University of California Center for Coastal Climate Resilience. Her research examines livelihood and landscape change as entwined processes. She is currently working on a project that looks at the uneasy articulations through which more-than-human coastal worlds are made in Indonesia. She has a Ph.D. in Anthropology with a Designated Emphasis in Feminist Studies from UC Santa Cruz, where she is a founding member of the Center for Southeast Asian Coastal Interactions.

# Bienvenido M. Gonzalez and the advancement of animal husbandry in the Philippines

# April Hope T. Castro

#### Abstract

This paper explores the early contributions of Bienvenido M. Gonzalez, the first Filipino Dean of the College of Agriculture, to the advancement of animal husbandry in the Philippines from a Filipino point of view. Gonzalez was a recipient of the American government's pensionado program, which sponsored young and promising Filipinos to pursue professional studies in the United States. Following the completion of their degrees, the pensionados were expected to return and serve the country. There were several pensionados who specialized in agricultural sciences, but only Gonzalez was given the opportunity to serve in a crucial position that influenced the growth of Philippine agriculture. Using primary data from the University of the Philippines presidential papers, personal letters, journals, and periodicals, we learned how this American-educated pensionado worked to promote livestock management among his peers in academia, strengthened the foundations of the country's premier agricultural school, and popularized agriculture as a respectable profession in a society that regarded agriculture as a lowly vocation. His leadership resulted in the founding of the Department of Animal Husbandry, a dedicated lot and facilities for an experiment station, and a lifelong passion for knowledge-sharing through research and extension.

#### Bionote

April Hope T. Castro is an Assistant Professor at the Division of History, Department of Social Sciences, College of Arts and Sciences, University of the Philippine Los Banos. She obtained her BA History (*cum laude*), MA Asian Studies, and PhD History degrees from the University of the Philippines Diliman. Her PhD dissertation is about Bienvenido M. Gonzalez: The Life of a Scholar, an Academic Leader and Institution Builder (1893-1953). She has written articles about 19th century archival materials on the province of Laguna, institutional and political history of UPLB, Southern Tagalog *vocabulario-related* studies, and crime and criminality focusing on *deportados/destierros* from Laguna to the various parts of the Philippines and beyond. During her academic tenure at UPLB, she was Head of the Division of History for three years. She was also the GE Coordinator for History 1 (Philippine History) from 2014 to 2024. At present, Dr. Castro is the Director of the UPLB General Education Program.

# Mudskippers as conservation emblems for mangrove parks

# Zeehan Jaafar & Kathy Poh

#### Abstract

Mangrove ecosystems throughout Asia are facing unprecedented losses resulting from unsustainable anthropogenic activities. Significant losses in areal cover have consequently impacted the efficacy of ecosystem service provision. Conservation of mangrove forests have been historically challenging due to the persistent negative perceptions surrounding these habitats. Conservation efforts have been hampered by ideas of mangrove areas as 'swamps' that are 'dirty' and 'dangerous' in which the areas are 'unproductive' and 'inarable'. The adoption of a flagship species can aid in conservation endeavours. Flagship species are organisms that are closely associated to specific habitats that can serve as ambassadors to increase public awareness for conservation needs. In our presentation, we discuss why mudskippers make excellent candidates as flagship organisms for mangrove ecosystems. These fishes closely associate with mangrove forests, are charismatic, and highly visible. Further, they are already embedded in the many native cultural heritage —as featured in many cuisines and local folklores throughout Asia. Widespread recognition of mudskippers as emblems of mangrove ecosystems can unite conservation narratives for the imperilled mangrove ecosystems.

#### Bionote

Zeehan Jaafar is a marine biologist at the National University of Singapore with research interests in the ecology of marine fishes and the conservation of their habitats. She has led and participated in many international and regional expeditions within the Indo-Pacific, to enhance the understanding of the diversity and distribution patterns of fish fauna. She is the author of several books focusing on fishes and the marine environments such as *Fishes Out of Water: Biology and Ecology of Mudskippers and Endangered Forested Wetlands of Sundaland—Ecology, Connectivity, Conservation*; as well as the lead editor for *The Singapore Blue Plan 2018*—the latter a marine conservation recommendation roadmap with a 10-year outlook for Singapore. A keen diver, she enjoys sharing her passion for marine areas through public engagement and education.

Kathy Poh conducts historical research at the Lee Kong Chian Natural History Museum, in the National University of Singapore. Her research interests lie in scientific knowledge production, and how it intersects with everyday life and cultures of people and societies. At the Museum, she leads an institutional oral history project and explores Singapore's past biodiversity and environments through human stories.

# Alvin Seale, the USFC Albatross, and the beginning of insular fish science in the Philippine Islands, 1907-1910

### **Brian Paul Giron**

#### Abstract

The appointment of the American ichthyologist Alvin Seale to the Bureau of Science in Manila in 1907 coincided with the arrival of the United States Bureau of Fisheries research vessel, Albatross. Both Seale and the Albatross were intended as the US government's response to the insular government's longstanding call for the systematic study of the Philippine colony's marine environment. Despite their shared interests and common goals, it became immediately apparent that the two represented vastly different approaches to the study of marine life, and that a line was being drawn between the bureaucracies of the US national government and its insular government in the Philippines. Seale soon began conducting his own scientific studies in the islands while eschewing further collaboration with the research vessel. While the Albatross expedition to the Philippines produced the largest collection of marine specimens at the time, Seale's activities represented the beginning of a distinctly insular view of field work that saw considerable immersion in the environment as critical. These extended surveys of the environment in situ saw Seale and his successors acknowledge indigenous knowledge and local life as crucial components in the production of scientific knowledge. This paper assesses the significance of this divergence in the study of fishes in the Philippine Islands and considers how the methods espoused by Seale produced a field of knowledge that was distinct from that which was pursued by his contemporaries in the United States.

#### Bionote

Brian Paul Giron is a staff member at the Department of History of Ateneo de Manila University in the Philippines. His current research interests include: the history of science and empire, environmental history, and the history of animals.

# Risk and social transformation: Commercialization, land use, and disasters in Nueva Ecija, 1880s-1910

### Diego F. Rebato Jr.

### Abstract

For a long time, the Spaniards viewed Nueva Ecija as a frontier that only accommodated limited land use and as part of a hostile region that hindered their attempts to expand northward. However, as Marshall MacLennan discusses in his works, commercialization prompted various socioeconomic and ecological changes that resulted in the intensification of rice monocropping to provide subsistence for a colony that prioritized cash crop production. This extended into the American period when the province saw the culmination of its decades-long transformation.

Using archival documents, primarily official reports, meteorological bulletins, personal accounts, and newspapers, this research analyzes the effects of hazards on Novo Ecijanos from the late nineteenth to the early twentieth century (1880s to 1910s). The paper is divided into two parts with the first part concerning the heightened exposure to hazards resulting from the intensified land use which is done by enumerating accounts of experiences of flooding and drought within the target period. The second part discerns the circling back of the effects of hazards on land use and land ownership which in turn consolidated the social relations that will explode into unrest and rebellions in the period succeeding the scope of this research.

By arguing how disasters in the province are both influencing and influenced by the complexities of social changes, this research aims to contribute to the growing literature about environmental history intertwined with social history.

### Bionote

Diego F. Rebato Jr. is a lecturer at the Ateneo de Manila University where he teaches Rizal and the Emergence of Filipino Nationalism. This research is funded by Max-Planck-Gesellschaft zur Forderung der Wissenschaften and the University of the Philippines School of Archeology thru the project Pantropocene: Finding a Prehistoric, Pan-tropical 'Antropocene'.

# Producing seismological and vulcanological knowledge: Scientific studies on earthquakes and volcanic eruptions in the Philippines, 1850s-1990s

### Kerby C. Alvarez

### Abstract

This paper discusses the process of scientific knowledge production on earthquakes and volcanic eruptions in the Philippines from the second half of the 19 th century towards the end of the 20th century. This period witnessed a significant number of large-scale seismological and volcanological disasters that claimed human lives and destroyed and altered urban and rural landscapes. Colonial and national governments responded to these calamities primarily implementing rehabilitation and reconstruction efforts. But vital to these state responses were the scientific efforts to study the nature and assess the effects of earthquakes and volcanic eruptions to enhance state capacities and community resilience in times of disasters. The emergence of a dedicated horde of scientists and engineers contributed to almost a century of scientific knowledge production on earthquakes and volcanic eruptions, and they were tasked and tapped to suggest technological solutions for the urban construction and preparedness challenges posed by such natural phenomena. The works of these professionals started the emergence of modern and synergized meteorology and seismology in the Philippines, manifested through scientific studies, commissioned works, instruments, and usable public materials. This paper tackles the scientific work of various institutions and the people that advanced the scientific understanding of these regularly experienced Philippine environmental hazards, namely the Observatorio Meteorológico de Manila (OMM), the Inspección General de Minas (IGM), the Philippine Weather Bureau (PWB), Commission on Volcanology (COMVOL) and their reorganized counterparts, the Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA) and the Philippine Institute of Volcanology and Seismology (PHILVOLCS).

#### Bionote

Kerby C. Alvarez is an Associate Professor at the Department of History, College of Social Sciences and Philosophy, University of the Philippines (UP) Diliman. He finished Bachelor of Arts in History (2010) and Master of Arts in History (2014) in UP Diliman. He obtained a Doctorat en Histoire, Art, at Archeólogie (HISTAR) degree from the Université de Namur in Belgium (2019). The National Commission for Culture and the Arts (NCCA) awarded him the Young Historian's Prize 2015. His research interests include environmental history, history of science, history of hazards and disasters in the Philippines and Southeast Asia, development of Philippine nationalism, and the local history of his hometown, Malabon.

# Interrogating environmental justice in Asian cities: Locally-led climate adaptation for building community resilience

### Emma E. Porio

#### Abstract

Rapid urbanization, intensified capitalist development, services-driven economy, and consumption-driven lifestyles have heightened environmental and climate justice issues and challenges in Asian cities. These development patterns drive the social-ecological transitions of cities, exacerbating the intertwining climate and disaster impacts on existing environmental inequalities and gendered intersectionalities (socio-economic status, migrant/non-migrant, etc.) in vulnerable communities. While the poor have contributed the least to global warming, they incur the most losses and damages yet receive very little public-private support. In response to these environmental and social challenges, local government units (LGUs), NGOs/CSOs, academia, and the private sector have collaborated on climate and disaster resilience innovations towards community resilience and environmental justice. Moreover, this paper interrogates the intersections of increasing climate and disaster risks, urban development, and the widening of social-environmental inequalities alongside the multiple layering of social intersectionalities in the risk governance systems of the metropolis.

#### Bionote

Emma E. Porio is Professor Emeritus at the Department of Sociology and Anthropology at the Ateneo de Manila University (ADMU) and Science Research Fellow at Manila Observatory. She was the former president of the International Sociological Association (ISA) and led the conceptualization and implementation of the transdisciplinary action research project, Coastal Cities at Risk: Investing in Climate and Disaster Resilience in the Philippines (CCARPH) from 2017-2022. Currently, she is spearheading the institutionalization of CCARPH scientific findings in academia (Master of Disaster Risk and Resilience), local governments, national government agencies, civil society and private sector in partnership with ADMU, Manila Observatory and the National Resilience Council.

# Tracing tobacco: The movement of American plant from New Spain to the Philippines

### Mario Alberto Roa

#### Abstract

This paper is part of an ongoing project, 'An Environmental History of Tobacco in the Island of Luzon, 1780-1880' with the objective of analysing the processes of environmental transformation generated by the introduction of the American tobacco plant on the island of Luzon from 1782 to 1880. This temporality is a key period in which the cultivation and the income derived from its sale become a key part of the European and Atlantic policy of the Spanish monarchy. Utilizing Spanish official correspondence and reports from Archivo General de Indias in Sevilla, Archivo General de la Nación México and the University of Santo Tomás Archives in Manila, this research seeks to explain the route of tobacco from American lands to Asian space.

Following the founding of the tobacco monopoly in the Philippines, the paper describes the first processes of environmental transformation that occurred and the cultural and socioeconomic impact of such transformation. Finally, the research contributes to understanding the complex process of circulation of plant species, animals and pathogens that occurred after the discoveries of the 16th century. It is worth highlighting that this study aims to clarify that the circulation of plants was not an exclusive event from the Old to the New World. That is, it was a mutual and constant process between various continental spaces. However, the transformation phases and environmental consequences have not been investigated in depth, especially in the context of the Philippines.

#### Bionote

Mario Alberto Roa received his bachelor's and master's degrees in history from the Universidad Nacional Autónoma de México (UNAM), and Doctor of Philosophy in History from the Centro de Investigaciones y Estudios Superiores en Antropología Social-Unidad Peninsular (CIESAS-México). He is currently doing postdoctoral research at the Center for Asian and African Studies - El Colegio de México and a member of the History, Health and Illness Project at the University of Sonora (México). His research interests include the environmental history of the Philippines (18th-19th century) and of the New Spain (16th-17th century).

# Floral imperialism: The water hyacinth (Pontederia crassipes) in Southeast Asia

### Timothy P. Barnard

#### Abstract

Water hyacinth (Pontederia crassipes), a plant native to South America, is a ubiquitous weed throughout Southeast Asia. It originally arrived in the colonial botanic gardens of Singapore and the Netherlands East Indies as a plant that could enhance the regional landscape. It quickly moved through Southeast Asian botanic networks as a planned introduction to provide aesthetic beauty to water systems but also to counter algae blooms, provide animal feed and act as compost, or biochar. This free-floating perennial aquatic species, however, grew at an expeditious rate, particularly in water containing high concentrations of sewage. By 1901, after Thai royalty brought a sample to Bangkok, it spread throughout the Chao Phraya delta, and eventually to Cambodia and the Mekong River, causing concern as early as 1908. The plant arrived in the Philippines by 1912, creating similar problems. In each instance it was too successful, usually outcompeting native flora and reducing oxygen in the water, thus affecting the biodiversity of flora and fauna in ecosystems where it came to dominate. This paper will discuss how the introduction of this seemingly innocuous plant reflects the role and power of empires, botanical networks and histories in the transforming ecology of imperial pasts in Southeast Asia, a legacy that remains well into the 21st century.

#### Bionote

Timothy P. Barnard is an Associate Professor in the Department of History at the National University of Singapore, where he specializes in the environmental and cultural history of island Southeast Asia. He has written and edited numerous books, book chapters and articles that focus on early modern eastern Sumatra, Malay identity, Malay film, Komodo dragons, and the Singaporean environment. His most recent monographs are *Nature's Colony* (2016) and *Imperial Creatures* (2019), and his most recent edited book is *Singaporean Creatures* (2024).

# From indigenous Philippine plant to global commodity: Towards an environmental history of abaca

# Patricia Irene N. Dacudao

#### Abstract

The study of Philippine history can confidently participate in the current historiographical turn towards global history by virtue of its rich ecological diversity, where flora and fauna abound on this maritime Southeast Asian archipelago. One such flora that can connect the Philippines to the world is abaca, a plant first used as textile by the indigenous inhabitants of Mindanao, and later traded in the global market as a material for cordage from the eighteenth to the twentieth centuries. Through the story of abaca, one can write the history of the land where it first grew wild on the Philippine highlands, and later on produced large scale in plantations from Luzon, Visayas and Mindanao. Today, the same plant is being used in German-manufactured car components (Barba et al 2020).

Taking its cue from pathbreaking works by Alfred Crosby (1975) on the Columbian Exchange and Sidney Mintz (1985) on sugar, this paper on Philippine global history using a commodity follows on more recent examples such as Riello and Parthasarathi's (2009) history of cotton as a global commodity. Adding another layer to the material histories of these works is using the perspective of environmental history to present a deeper understanding of the times we live in now, by understanding the past practices of both indigenous and foreign actors from the works of anthropologists such as Fay Cooper Cole (1913), to the economic histories presented by Owen (1984), and the author's own (2023). Fusing the global with the local, this paper ends by studying the practices of local and foreign ways of producing abaca, and the lessons that can be gleaned to forge a path towards a more sustainable future for the indigenous plant that has become a plantation crop.

#### Bionote

Patricia Irene N. Dacudao is Chair and Assistant Professor at the Department of History, Ateneo de Manila University. Her book *Abaca Frontier: The Socioeconomic and Cultural Transformation of Davao, 1898-1941* (Ateneo de Manila University Press, 2023) received the Outstanding Scholarly Work Award in the School of Social Sciences in 2024, and was a Finalist in the 2024 National Book Award.

# Development for what and for whom? Urbanization and vegetable farming in Baguio, 1899-1941

# Marie Beatriz Gulinao and Alvin D. Cabalquinto

#### Abstract

Interest in Baguio rose as Americans sought to expand their rule over territories in the Philippines that the previous Spanish colonizers failed to control. With their expansion to the region, the appeal of Baguio to the Americans grew deeper due to its unique environment and temperate climate. Projects to develop Baguio and its neighboring municipalities were soon underway with the goal of the city serving as a summer capital and the region eventually being politically-integrated with the Chirstian lowlands.

While the people of Baguio may have enjoyed the fruits of these developments, these were still undertaken primarily to serve American interests. This research traces how Baguio was transformed to suit the needs of the colonial government in the guise of its civilizing mission in the Philippines. Particularly, it looks into the urbanization of Baguio as described in the Reports of the Philippine Commission and the Historical Data Papers; and the activities in its experiment station meant for growing vegetables from imported seeds to be traded in the lowlands as discussed in the Bureau of Agriculture's The Philippine Agricultural Review and the periodical, The Philippine Farmer.

This research seeks to discuss how developments in Baguio during pre-war American colonial rule aligned with American interests and how it eventually influenced social life and the environment in the city.

#### Bionotes

Marie Beatriz Gulinao currently teaches Readings in Philippine History with the Department of History of the Ateneo de Manila University. Her research interests include twentieth century Philippines, social history, and memory politics.

Alvin D. Cabalquinto is an Instructor at the Department of History, Rosita G. Leong School of Social Sciences. He graduated with a BS in Health Sciences degree with a minor in History and finished his MA in History at Ateneo de Manila University. He has taught courses in Rizal, Philippine history, Asian history, and bioethics and advises undergraduate health sciences majors for thesis research. He is also an editorial assistant of *Philippine Studies: Historical and Ethnographic Viewpoints*, a Senior Fellow of the Ateneo Martial Law Museum and Library, and the moderator of its student arm, Ateneo Martial Law Museum and Library Junior Fellows. His research interests include the history of public health and medicine, gender studies, sexuality and women's history, cultural history, and cultural heritage.

# Porcinomania: Raising pigs and undoing revolution in urban north Vietnam, 1975–1986

### Uyen Nguyen

#### Abstract

In the late 1970s and early 1980s, a trend emerged and flourished throughout North Vietnamese cities: pig raising. Instead of celebrating recent military victories (against South Vietnam and their allies, the Khmer Rouge in Cambodia, and later China), or extolling revolutionary ideals and pathways to communism, urban North Vietnamese talked about the pigs they were raising in the corners of their homes: selecting suitable breeds, sourcing quality piglets, feeding strategies, and diagnosing and treating diseases, etc. Drawing on interviews, memoirs, and literary works, this paper combines historical and literary analysis to trace the origins, development, and broader implications of this phenomenon. It argues that the presence of farm animals in urban spaces and the popularity of pig raising were not merely signs of economic hardship but also significant markers of a deeper reversal of key politico-economic structures established by the communist state over the previous three decades: the command economy, the subsidy system, the urban-rural divide, and revolutionary discourse. The sight of pigs in cities, this paper contends, represents one of the earliest episodes in Vietnam's transition from socialism to capitalism.

#### Bionote

Uyen Nguyen is a Lecturer in the Department of History at the National University of Singapore. Her research explores historical transitions in Vietnam, with a focus on the interplay between politico-economic change and socio-cultural identity. Her current book project examines the communist takeover of formerly French-controlled cities in North Vietnam and the transformations that unfolded in these urban centers between 1949 and 1958. She received a PhD in history from the University of California, Berkeley in 2021.

# Landscapes of resistance and adaptation: The Aetas' response to the establishment of Subic Naval Base in Zambales, Philippines

# Janet S. Reguindin-Estella

#### Abstract

Established in 1901 in Zambales, Central Luzon, the Subic Bay Naval Reservation (later known as Subic Bay Naval Station) served as the primary American naval base in the Philippines because "it offers the most advantageous point in the matter of defense, harbor facilities, and healthful conditions of any place in the islands (Bureau of Navigation, 1901)." The creation of this naval reservation was through an Executive Order issued by President Theodore Roosevelt which ordered the allocation of approximately 16,250 acres of land in Bataan and Zambales for the naval station project which led to significant environmental and economic changes in the Province.

Among the most affected with these changes were the Aeta communities residing in the forests of Subic and Olongapo in Zambales. As an indigenous group, the Aetas relied heavily on their natural environment for livelihood and cultural practices. The establishment of the naval base disrupted their traditional way of life, leading to displacement, loss of ancestral lands, and socio- economic struggles.

This study examines the struggles of the Aetas and the development of Subic as a town as an effect of the establishment of Subic Bay Naval Station from 1901 to the post-World War II period. Utilizing official reports, newspaper articles, and other related studies, it attempts to analyze how the colonial policies shaped Subic and examine the Aetas' history of resistance and adaptation

adaptation.

#### Bionote

Janet S. Reguindin-Estella is an Assistant Professor at the University of the Philippines Department of History, where she obtained her B.A. History, M.A. History, and Ph.D. in History. Her research interests include life history, women's history, and local and environmental history of Zambales. In 2012, she was awarded the Young Historian's Prize by the National Commission for Culture and the Arts (NCCA).

# "Wag ka anya magsamuk" (Don't be noisy): Silencescapes in Marinduque, 1916-1974

### Emmanuel Jayson V. Bolata

#### Abstract

Inspired by the idea of 'soundscapes' (sonic/sound environment) by R. Murray Schafer (1977), I am presenting here the idea of 'silencescapes,' as observed and experienced in the island province of Marinduque. I define silencescapes as 'places produced by silence.' Twentieth century sources on Marinduque speak not only of geophony (sounds of non-living things) and biophony (sounds of non-human living things), but also—and more strikingly— of silences and their contexts. These sources include the H. Otley Beyer Ethnographic Collection papers written by Asuncion M. Arriola, Nieves Hidalgo, Eduardo E. Palma, Serapio Rolloqui, Cornelio C. Restar, and Miguel Manguerra (1916-1928) and the writings of Rafael J. Semilla (1970-1971). Silence is accorded to ensure safety from possible attacks of malevolent spirits and creatures at night, to thank the food spirits after harvest, to have a good catch at sea, and to pay respect to the dead. Thus, silencescapes can be sites where one can discuss the natural environment, folk beliefs, and economic life of a locality in a specific historical timeframe. I will end by presenting a case of cultural change in postwar Marinduque: Moriones, a rite-festival done during the Holy Week, was commercialized since the 1960s, erasing the traditions of silence which mourn the death of the Christian God. Shown here is how capital and politics have been silencing silence through its reverse—by making sounds.

#### Bionote

Emmanuel Jayson V. Bolata is an assistant professor at the Department of History, College of Social Sciences and Philosophy, University of the Philippines Diliman, where he also obtained his BA (2018) and MA (2024) degrees in History. His research interests include cultural history of science (i.e. astronomy and cosmology), literary studies, and local history of his province, Marinduque.

# Lakad, lapit (Walking, nearness): Reviving the habit of walking and rediscovering nearness on the way to ecological justice

### Remmon E. Barbaza

#### Abstract

Drawing on the richness of the Filipino language and insights from Heidegger's phenomenology, this presentation aims to show that the revival of walking (lakad) as an essential part of our way of life and the rediscovery of nearness (lapit) as a fundamental character of our being human are intertwined. Moreover, they are also necessary in overcoming the socio-political and cultural divides that are tearing apart our people and treading the path towards ecological justice.

#### Bionote

Remmon E. Barbaza is Professor of Philosophy at the Ateneo de Manila University. He holds a BA in LinguisFcs from UP Diliman, an MA in Philosophy from the Ateneo de Manila University, and a PhD in Philosophy from the Hochschule für Philosophie in Munich, Germany. His work revolves around Heidegger, language, translation, and the city. He edited the book, *Making Sense of the City: Public Spaces in the Philippines* (Ateneo de Manila University Press, 2019). He is a founding member of the Heidegger Circle in Asia and a co-director of the Philosophy of the City Research Group.

# The dual temporalities of waste: Sewage surveillance and the Filipino migrants in pandemic Hong Kong

# Nicolo Paolo P. Ludovice

#### Abstract

This paper examines sewage surveillance in Hong Kong during the COVID-19 pandemic from the perspective of a Filipino migrant, exploring how the practice transforms waste into a site of historical temporality and temporal anomaly. Sewage, often relegated to invisibility, emerges as a powerful medium of surveillance, connecting individual bodies to the city's public health apparatus. Drawing on personal experiences and the broader realities of migrant labour, this paper situates sewage surveillance within the historical context of Hong Kong's sanitation infrastructure and its colonial legacies, while also interrogating how migrants are doubly surveilled—both as producers of waste and as "waste" within the socio-political order.

The paper highlights how migrant Filipinos, who occupy precarious positions as domestic workers and essential labourers, mirror the dual temporalities of sewage. As producers of waste, their bodily outputs are transformed into data that maps contagion and enforces lockdowns, rendering them hyper-visible within the city's public health regime. Simultaneously, as individuals often treated as disposable or marginal, they embody the temporal anomaly of waste-matter that refuses to disappear, haunting the present and shaping the future. This duality underscores the ethical and emotional burdens placed on migrants, who are surveilled not only through their waste but also through their labour, mobility, and social presence.

By framing sewage as both a historical artefact and a temporal anomaly, this paper reveals the entanglement of waste, governance, and identity in the context of pandemic surveillance. It argues that the experiences of migrant Filipinos expose the hidden flows of power and exclusion within urban infrastructures, offering a critical perspective on how waste and marginalised bodies are governed in hyper-connected cities. This paper contributes to the environmental humanities by rethinking waste as a dynamic and contested site of temporality, identity, and social justice.

#### Bionote

Nicolo Paolo P. Ludovice is a research assistant professor at the Division of Public Policy, Hong Kong University of Science and Technology. His research interests broadly cover environmental history, animal history, the history of science, technology, and medicine (including biomedicine, public health, and zoonoses), and the histories of food and foodways, with the Philippines as his geographical focus. His work appears in *Society and Animals, Global Food History, Energy Strategy Reviews*, the *Electricity Journal*, and *Climate Risk Management*, as well as in the edited collection *Routledge Handbook of Environmental History* (2024) and *Halo-Halo Ecologies: The Emergent Environments Behind Filipino Food* (2025). He is the recipient of the Wang Gungwu Prize for Research Postgraduate Students by the University of Hong Kong (2022) and the prestigious Young Historian's Prize 2022 by the National Commission for Culture and the Arts, the Republic of the Philippines