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PACIFIC CIRCLE NEWS and NOTES

Business Matters

The Pacific Circle is trying to honor international efforts to reduce carbon and paper. We will continue to publish hard copies of the *The Bulletin*, but please let the editor know if you would prefer to only receive an electronic copy. The editor can be reached at peterh@hawaii.edu.

In keeping with that honorable goal, the editor will do his best to fulfill obligations and share information online. If you do not currently receive emails from the editor, but would like to in the future, please email the editor at peterh@hawaii.edu.

The University of Hawai'i Foundation requests that dues or contributions made by check be made payable to "The U.H. Foundation" with "The Pacific Circle" in the memo space. The subscription and dues rates remain: US\$25.00 for individuals and US\$35.00 for institutions. Dues must be paid by check or credit card. Contributions can be made online.

The Circle web site includes previous issues, documents from conferences, links to affiliated and complementary groups, a blog with information about events and publications, and an option for searching previous issues of *The Bulletin*. Please visit: <http://thepacificcircle.com>.

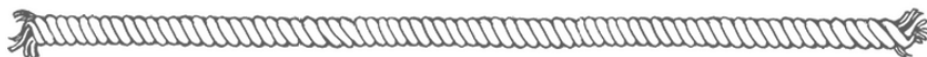
The editor prepares issues of *The Bulletin* for potential new members, conferences, and departments. Please notify the editor if you would like to take copies with you to a conference or if a colleague might appreciate a copy. Thank you.

Recent Publications, Honors & Scholarly Activities by Circle Members

Congratulations to...

Prof. Michael Osborne, Oregon State University, who received the Joseph H. Hazen Education Prize from the US History of Science Society at its annual meeting in July 2019. Mike will also be assuming the presidency of the International Union of History and Philosophy of Science and Technology this upcoming January.

Prof. Warwick Anderson, University of Sydney, for the publication of an updated edition of *The Collectors of Lost Souls*, The Johns Hopkins University Press, and for publication with James Dunk, Tony Capon, and David S. Jones, "Human Health on an Ailing Planet," *New England Journal of Medicine* 381 (2019), 778-782, an historical account of medical responses to climate change.



CONFERENCE REPORTS

Many thanks to Jongsik Christian Yi (Harvard University) for the following report from the Mr. Science, May Fourth, and Modern China Workshop, hosted by Dr. Victor Seow (Harvard University) and the Fairbank Center for Chinese Studies, Harvard University. The Pacific Circle co-sponsored the workshop.

“On February 14-15, 2019, a group of historians of science gathered at Harvard University for a workshop on science and the May Fourth Movement. Our thanks to our host, the Fairbank Center, and to our co-sponsor, The Pacific Circle.

The Movement, which started in China a hundred years ago on May 4, 1919, was primarily concerned with national salvation, and its promoters had called for the introduction of science and democracy – anthropomorphized as “Mr. Science” and “Mr. Democracy” – to that end. The workshop was primarily concerned with (re)inserting questions of science into the study of May Fourth China and with reconsidering the meaning of “Mr. Science” to Chinese modernity and to the history of science more generally.

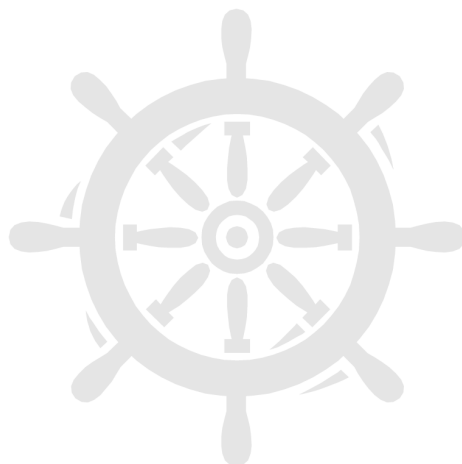
Fa-ti Fan, Sean Hsiang-Lin Lei, and Zuoyue Wang situated the May Fourth in China’s long 20th century and in China’s transition from the traditional to the modern. Fan suggested seeing the May Fourth Movement as a historical node along the epistemological continuum, not as a rupture. Like Fan, Lei reread Yan Fu’s (1854-1921) *On Heavenly Evolution*, the Chinese translation of Thomas Huxley’s *Evolution and Ethics*, and argued that the book is more than a brochure about social Darwinism. Rather, *On Heavenly Evolution* is a result of the first intellectual attempt to integrate modern science with morality in China, and the success of the book made Yan a major interlocutor that the following generation of May Fourth science promoters sought to overcome to propound their own theory on the relationship between science, morality, and social progress. Wang traced the intellectual genealogy from the May Fourth generation to that of the 1980s Liberalism, centering on the scientists Zhu Kezhen (1890-1974) and Fang Lizhi (1936-2012). All three papers historicized the May Fourth understanding of science, but also showed that it was constantly reimagined as part of the shaping of Chinese modernity.

Grace Shen, Victor Seow, and Sigrid Schmalzer were concerned with the relationship of science to gender, technology, and popular democracy. Rather than reiterating the cliché that science is gendered, Shen analyzed how gendered socio-cultural contexts interlinked with, if not perpetuated, the idea that science is objective and gender-neutral. Seow reminded us that technology has been largely omitted from the study of May Fourth scientism by emphasizing the materiality of knowledge, the

issue of translation, and etymological roots of seemingly self-evident concepts such as science, technology, technique, invention, and innovation. Schmalzer went back to the May Fourth's pairing of science and democracy. Starting from the transnational background that the promise of the October Revolution and socialism traveled to Asian countries and was seen as a popular democratic alternative for the future, she explored the role of science in realizing this future and the interplay among science, class, and activism in and beyond the May Fourth context. These three thematic papers globalized the study of the May Fourth and presented its broader implications to the global history of science.

The contributions of the discussants, Warwick Anderson, Nicole Nelson, and Eram Alam, further enriched the workshop. As non-China specialists, the three asked and tried to think with the presenters about the question of how May Fourth China is similar to and distinct from patterns of engagement with modern science in other parts of the world. If science in China is indeed different from science elsewhere, perhaps it is because the May Fourth intellectuals envisioned the distinction between the modern and the traditional in a unique way, responding to the specific old worldviews and ways of life they inherited, as well as the new knowledge and practices they tried to come to terms with in their own time. At the same time, we could see some commonalities between May Fourth China and other regions by situating the former within the frameworks of science and anti-colonial nationalism; the global Wilsonian moment of the 1920s; technoscience in political crisis; and science in the service of radicalism.

In short, *Mr. Science, May Fourth, and Modern China Workshop* added color to the study of May Fourth China by historicizing and globalizing China in 1919 and its legacies. Echoing Fa-ti Fan, the participants in this workshop may think that 100 years is not long enough to exhaust the May Fourth as a subject of research in both Chinese studies and the history of science. We hope that this workshop could be a stepping stone opening the next century of debate on the May Fourth Movement."



Warwick Anderson reports the following from “Postcolonial Tensions: Sciences, Histories and Indigenous Knowledges,” a workshop of historians and graduate students held at Harvard University (and thanks to Prof. Anderson for the photographs of the conference dinner and book launch):

“What might it mean to decolonize the history of science?”

Several emerging leaders of the field and many graduate students have been seeking answers to that question.

On April 12-13, 2019, the Department of the History of Science at Harvard University, with the support of the Gough Whitlam and Malcom Fraser Chair of Australian Studies and Harvard’s Indigenous Studies Program, and the sponsorship of the Pacific Circle, hosted a workshop examining various “postcolonial” and “decolonial” approaches to remaking the history of science, as well as science and technology studies (STS). Organizers Gabriela Soto Laveaga (University of California, Santa Barbara) and Warwick Anderson



(University of Sydney/Harvard University) brought together twenty-five scholars from North America, Australasia and the Pacific, many of them Indigenous researchers, for a productive two days of vigorous conversation, trying to imagine a decolonized future for our field. Harvard graduate students actively shaped these discussions, challenging many of our preconceptions. One of the workshop highlights was Philip Deloria’s launch of *Pacific Futures: Past and Present* (University of Hawai‘i Press, 2018), edited by Warwick Anderson, Miranda Johnson, and Barbara Brookes. The book is a collection of essays that explores other modes of doing history.”

Philip J. Deloria delivered the following comments on the occasion of his book launch:

“I was, at one point in my career, happy to be at a time and place when Pacific Studies and North American Indigenous studies drew very close in their orbits. At



*From left to right:
Barbara Brookes
(Otago), Miranda
Johnson (Sydney),
Philip Deloria
(Harvard) and Warwick
Anderson (Sydney/
Harvard)*

the University of Michigan, I learned about Pacific mobility from Damon Salesa and Vince Diaz, Hawaiian sovereignty from Amy Stillman, and decolonizing literature from Susan Najita. We'd excitedly compare notes on the Protestant church, football and other sports, cars and roadbuilding, militarization, and more... and it always seemed like the stories were entangled and interlocking, down to the actions of our relatives two or three generations back.

That's a potted story of a very recent past. I remember being there, imagining a certain kind of intellectual future, one of dialogue and collaboration and something emergent, new, and exciting. That future, in turn, would draw on both our own intimate pasts – exchanged with one another in family stories – and the wider world of the collective histories of our fields. We lived in a present in which past and future oscillated. We told histories of the future and conjured futures built on pasts.

There was an affect to this simultaneous, temporal uncanny. I recall the feelings of it, now as a set of memories, something like Roland Barthes' Lincoln conspirators: they are long dead; they are about to die. The affect – the historicity – is captured in a line I love, from the historian Bruce Catton, describing an optimistic blindness and overconfidence characteristic of the settlers of Northern Michigan: "We lived in Indian summer and mistook it for spring. Winter lay ahead just when we thought June was on the way."

Today, we know that it's deep autumn, and that winter – in the form of climate change – is falling quickly and surely. Our scales now are necessarily different: Now, we work hard to think back into deep time and big time, such that we try to wrap our heads around geological eras, historians straining to think like earth scientists. We try to think far forward, well into the Anthropocene, imagining the consequences of the unimaginable, humanists struggling to find the languages to convince our fellows that planetary warming means pretty much the end of it all. Nowhere is the task as urgent as the Pacific.

Pacific Futures puts the sensibilities of our moment – optimistic cross-field

dialogues and cautionary warnings about getting your seasons fatally mixed up – in a productive scholarly context. It's the kind of book I *future-imagined* back in that past, replete with all the pertinent questions: What is historical consciousness, anyway? What is it... what has it been... what will it be... for Indigenous peoples? For others? Is it possible to imagine space and time and pasts differently, in a genealogical sense sprawled across water and temporality? If it is possible, are there lessons to be drawn, both for the local and the universal actor? How might such historicities function in the context of (de)colonization and petro-neo-colonialism? In the context of a shared, entangled modernity? How does the Pacific itself function in such a conversation? As a new historiographical site? As a locus for seeing globalization? As a canary in the coalmine of rapaciously blind global capitalism? Or as a place of a thousand localities, "plural and heteroglossic?" As a place "good to think with?"

There were once futures imagined. Many of those – like the one conceived with Damon, Amy, Vince, and Susan – did not come to pass – at least not in the form we imagined, that of the academic department. But "future" means that there are other possibilities! The professional organization, for example, now called NAISA, meeting in Aotearoa New Zealand this year. Or the book. *Pacific Futures: Past and Present*: none of us have essays in the book, but we're kind of there, lurking around in the footnotes now and then.

As historians, we take seriously the contingencies that mark the past; *Pacific Futures* encourages us to approach the future – and the relation between past and future – with an appreciation for contingency and unpredictability... and with a skepticism toward our own appreciation. You can't ask for more.

So congratulations to Warwick Anderson, Miranda Johnson, Barbara Brookes, and the contributors for crafting an excellent, thought-provoking, timely volume of scholarship. Thanks for reminding me of a good past, even in the context of an uncertain future."

Philip J. Deloria is Professor of History at Harvard University. Additionally, he is a trustee of the Smithsonian Institution's National Museum of the American Indian, where he chairs the Repatriation Committee. He is former president of the American Studies Association, an elected member of the American Academy of Arts and Sciences, and the recipient of numerous prizes and recognitions.



Hans van Tilburg (NOAA Federal) has kindly provided the following report from the First Fautasi Heritage Symposium, held April 10-11, 2019, in America Samoa:

“[t]he National Marine Sanctuary of American Samoa and American Samoa Historic Preservation Office hosted one of the most important sanctuary efforts to preserve our maritime connections to the ocean: the inaugural Fautasi Heritage Symposium. The workshop’s goal was to share the complex history of *fautasi* (Samoan longboat) racing in American Samoa, and seek ways to sustain this important cultural practice in the future.

The *fautasi* longboat derives from the blending of Samoan watercraft and Western whaleboat traditions, producing the paddle *taumualua* race and war canoe by 1849. The refinement of the shorter *tulula* and subsequent *fautasi* (100+ feet) followed in the 1890s. Intense desire for these unique vessels led to a notable building boom, often a unifying effort among each village. The adoption of oars and fixed rudders made these craft essential for all passenger/cargo service, racing competitions, and war parties among the islands. With the cessation of warfare and the incursion of powered vessels, the local roles for village *fautasi* slowly decreased over time to the one common remaining core: racing.

Today the sport of *fautasi* racing is the main event during Flag Day (April 17) celebrations in American Samoa. The entire village supports the training of their own team, which can span the months prior to the race. Modern *fautasi* are adopting high tech lightweight competitive shells and carbon fiber oars, but the training, competitive spirits, and village pride remain true to the Samoan roots of the *fautasi* heritage.

The two-day symposium presented specialized panels addressing *fautasi* history, *fautasi* sport, tourism and rowing, and the place of *fautasi* in the maritime cultural landscape of watercraft and navigation in Samoa. It also launched a critical study promoting the health aspects associated with *fautasi* training (with the University of North Carolina–Wilmington). The event held multiple breakout sessions for collecting input from captains, rowers, village leaders, the public, and youth (students). Oral interviews captured histories of watershed moments in *fautasi* racing and provided a platform for discussion of critical contemporary issues. Recommendations will follow addressing the organization of the race, safety concerns, and even the possibility of shifting the race schedule due to the impacts of climatic change.

Like other significant watercraft in the Pacific, the *fautasi* is symbolic of a specific and unique island past. The practice of *fautasi* racing provides a lesson in the benefits of maritime traditions and practices for our entire sanctuary system. Our National Marine Sanctuary of American Samoa is now front and center in the effort

to sustain this *fautasi* heritage and practice, improving the health of the ocean and the health of ourselves.

Fautasi racing in American Samoa is rooted in the maritime cultural landscape of the past, but has clear benefits for village unity and human health in the present. Sustaining this connection to the ocean is important to the health of the communities and our ecosystem.

Contact: Dr. Hans Van Tilburg, Maritime Heritage Coordinator Pacific Islands Region, NOAA Office of National Maritime Sanctuaries at hans.vantilburg@noaa.gov.



Panel Report: Pacific Science in Transnational and Translocal Perspective – By Geoff Bil, University of Delaware

The Pacific Circle kindly sponsored our conference panel, “Pacific Science in Transnational and Translocal Perspective,” organized by Geoff Bil for this year’s History of Science Society meeting in Utrecht, Netherlands. Attendance was robust, in defiance of a record-breaking heat wave, and despite a number of highly competitive parallel sessions.

Anne Ricculi, of Drew University, commenced with a discussion of “The Collected Letters of Sarah Maria Smythe: Communicating Darwin’s Coral Growth Theory to Belfast Readers, “*Ten Months in the Fiji Islands*.” Smythe’s writings, we learned, were emblematic both of Belfast’s self-identification as an active participant in British imperial endeavors, and of the role played by public involvement in Victorian geology.

Our next panelist, Jessica Wang from the University of British Columbia, delivered a paper entitled “Insects and Empire: Entomological Expeditions and Biological Pest Control in Early Twentieth-Century Hawai‘i,” which examined the search for African and Southeast Asian insect parasites to mitigate Hawaiian populations of Mediterranean fruit flies, a potent agricultural pest. With emphasis on the work of the Italian entomologist Filippo Silvestri, Wang’s analysis testified to the global ecological relationships that constrained imperial agriculture, and highlighted the inter-imperial networks active in the formation of tropical agriculture as a scientific discipline.

We turned next to Aijie Shi from the University of Wisconsin-Madison, who spoke regarding “National Science in Republican China: The Birth of China’s Policy on Foreign Biological Expeditions.” Although unable to join us in person owing to unforeseen visa travel restrictions, Shi happily furnished us with a digital prerecording that analyzed the origin of Chinese biological expeditions as a response to Japanese scientific research along the Yangzi River in 1929, and as a case study in

the significance of science as a national – and nationalizing – enterprise.

Geoff Bil from the New York Botanical Garden followed with a paper entitled “Cultivating Resistance: Ethnoecology, Anticolonialism and Indigenous Territoriality in Twentieth-Century Southeast Asia.” Although American interest in highland Sumatran and Filipino knowledges was rooted in a trans-Pacific imperial vision, as Bil demonstrated, it was also shaped crucially by active indigenous Mohawk, Batak, Hanunoo and Ifugao resistive interventions.

Dong Xianliang, who came to us from the City University of Hong Kong, rounded out our session with “Cold War Prevention: The Discourse of Hong Kong Flu and Its Controversies, 1968-1972.” This paper considered how Hong Kong’s response to the 1968 pandemic, which emerged through competition and cooperation between Hong Kong, Japanese and United States institutions, also served as a frontier in the Cold War through its mobilization of the metaphor of disease to segregate communists from their capitalist counterparts.

Collectively, we adopted an expansive view of Pacific science, extending the reach of Pacific cultural and information networks from East and Southeast Asia, through the South Pacific and continental United States, to contexts as far afield as Britain, Ireland, Italy and West Africa. In varying ways, all five presentations also scrutinized Pacific nations and empires as imagined and highly contingent entities, subject to local political and environmental pressures, and implicated in far-flung trans-Pacific and transglobal concerns.

Our panel chair, Hans Pols from the University of Sydney, superintended a lively audience conversation following each of the papers in turn, and further enriched these discussions with insightful commentary. Topics for reflection included, among other things, the ongoing utility of a “trans-Pacific” analytical framework, given the contested nature, colonial resonances, and protracted geographical scope of Pacific scientific undertakings.

FUTURE MEETINGS, CONFERENCES and CALLS FOR PAPERS

12-14 December 2019. “8th International Conference on History of Medicine in Southeast Asia (HOMSEA 2019),” to be held at the Centre for the Humanities and Medicine, The University of Hong Kong. Themes include: Ecologies, Governance, Borders, Therapeutics, and Caregiving. Please contact Dr. Carmen Tomfohrde at chm1@hku.hk.

BOOK, JOURNAL, EXHIBITION and RESEARCH NEWS

Proceedings of the Royal Society of Victoria 131: Part 1 (2019) includes the following articles: “Porifera (Calcarea: Lithonida) from the Lower Miocene Batesford Limestone, Victoria, Australia, including a New Species *Monoplectroninia malonei* sp. nov.,” by F. McSweeney, J. Buckeridge, and M. Kelly; “Maryborough, a New H5 Meteorite Find from Victoria, Australia,” by W.D. Birch, D.A. Henry, and A.G. Tomkins; “Indigenous Use of Stellar Scintillation to Predict Weather and Seasonal Change,” by D.W. Hamacher, J. Barsa, S. Passi, and A. Tapim; and “Extraordinary Dimorphism in the Phyllograptid *Harrisgraptus* n. gen. from the Early Bendigonian (Early Floian, Early Ordovician) of Victoria, Australia,” by A.H.M. VandenBerg. The issue also includes “Future Rethinking Forum” with reflections on electricity networks, heatwave forecast services, and heat alerts.

Osiris 34:1 (2019) is a special issue devoted to “Presenting Futures Past: Science Fiction and the History of Science.” There are several articles with a Pacific focus, or which at least discuss societies and scientists covered by the Pacific Circle. Those include: David A. Kirby, “Darwin on the Cutting-Room Floor: Evolution, Religion, and Film Censorship;” Lisa Raphals, “Chinese Science Fiction: Imported and Indigenous;” Projit Bihari Mukharji, “Hylozoic Anticolonialism: Archaic Modernity, Internationalism, and Electromagnetism in British Bengal, 1909-1940” and Nathaniel Isaacson, “Locating Kexue Xiangsheng (Science Crosstalk) in Relation to the Selective Tradition of Chinese Science Fiction.”

The History of Science Society of Japan has issued its journal, *Historia Scientiarum* 28:3 (March 2019), a special issue on “The History of Geological Sciences in East Asia, Part II: Geoscience History in Transition.” Toshihiro Yamada and Michiko Yajima co-edited the volume, which includes the following articles: Gregory A. Good, “Geophysics in Japan in the Late 19th and Early 20th Centuries;” Yajima, “Edmund Naumann (1854-1927): Fossa Magna and Mt. Fuji;” Yamada, “Between the Field and the Classroom: The Using and Making of Geoscientific Historia in Meiji-Taisho Japan;” Shigeo Aoki, “Earth Science before the Plate Tectonic Revolution in Japan: The Earth Sciences Department at Nagoya University, 1942-1967” and Gianluca Valinsise, “Fusakichi Omori and Italy: Excerpts from the Visits of a Japanese Seismologist in the Belpaese.”

Emu has published this year a special issue devoted to “Ornithology of New Guinea and the Indo-Pacific Islands,” guest edited by Leo Joseph.

Australian Journal of Botany 67:3 (2019), edited and introduced by Margaret Byrne, is a special issue devoted to the study of the genetics and ecology of plant species on the Banded Iron Formations in the Yilgarn, Western Australia.

Historical Records of Australian Science 30:2 (2019) includes the following

articles of possible interest: Gael Keig, Robin L. Hide, Susan M. Cuddy, Heinz Buettikofer, Jennifer A. Bellamy, Pieter Bleeker, David Freyne, and John McAlpine, "CSIRO and Land Research in Papua New Guinea, 1950-2000, Parts 1 and 2." Thomas A. Darragh, "Lothar Becker: A German Naturalist in Victoria, 1849-52, 1855-65." Tom W. May and Thomas A. Darragh, "The Significance of Mycological Contributions by Lothar Becker" and Hilary Howes, "Lothar Becker's Contributions to Anthropology."

Here is an odd one, but it caught the editor's eye: *HAU: Journal of Ethnographic Theory* 9:1 (2019), special issue on "Science in the Forest, Science in the Past." Articles of potential interest to Pacific Circle members include: Marilyn Strathern, "A Clash of Ontologies? Time, Law, and Science in Papua New Guinea" and Karine Chemla, "Different Clusters of Text from Ancient China, Different Mathematical Ontologies." There are also articles covering the Amazon region and South Asia.

The Journal of Pacific History 54:3 (2019) is a special issue devoted to "Writing the History of Archaeology in the Pacific: Voices and Perspectives," with an introduction by Hilary Howes and Matthew Spriggs. Research articles include discussions of field techniques, networks and missionary methods, indigenous agency and Thor Heyerdahl's ethnographical attempts.

Interested in public science and technology displays at exhibitions and museums? If so, please note the publication of Elena Canadelli, et al., *Behind the Exhibit: Displaying Science and Technology at World's Fairs and Museums in the Twentieth Century*, Smithsonian Institution Press, 2019.

Anthropological Forum 29:3 (2019) is a special issue devoted to "Hierarchy and Egalitarianism in Austronesia," including articles of interest regarding the Pacific in general, and, more specifically Taiwan, Southeast Asia, Papua New Guinea, East New Britain and Vanuatu.

PACIFIC BIBLIOGRAPHY: SELECTED RECENT and FORTHCOMING PUBLICATIONS

BOOKS and BOOK CHAPTERS

Aboriginal Biocultural Knowledge in South-Eastern Australia: Perspectives of Early Colonists, by **Fred Cahir**, **Ian Clark**, and **Philip Clarke**, CSIRO Publishing, 2019.

Algae of Australia: Marine Benthic Algae of North-Western Australia, 2: Red Algae, by **John Huisman**, CSIRO Publishing, 2019.

The Allure of Fungi, by **Alison Pouliot**, CSIRO Publishing, 2019.

The Australian Bird Guide, by **Peter Menkhorst, Danny Rogers, Rohan Clarke, Jeff Davies, Peter Marc sack, and Kim Franklin**, CSIRO Publishing, 2019.

Australian Birds of Prey in Flight: A Photographic Guide, by **Richard Seaton, Mat Gilfedder, and Stephen Debus**, CSIRO Publishing, 2019.

Australian Forest Woods: Characteristics, Uses and Identification, by **Morris Lake**, CSIRO Publishing, 2019.

Australian Magpie: Biology and Behaviour of an Unusual Songbird, by **Gisela Kaplan**, CSIRO Publishing, 2019.

Birds in Their Habitats: Journeys with a Naturalist, by **Ian Fraser**, CSIRO Publishing, 2019.

Community-Based Control of Invasive Species, by **Paul Martin, Theodore Alter, Don Hine, and Tanya Howard**, CSIRO Publishing, 2019.

Effective Ecological Monitoring, by **David Lindenmayer and Gene Likens**, CSIRO Publishing, 2019.

Fishes of the Salish Sea: Puget Sound and the Straits of Georgia and Juan de Fuca, by **Theodore W. Pietsch and James Wilder Orr**, University of Washington Press, 2019.

Flora of the Hunter Region: Endemic Trees and Larger Shrubs, by **Stephen Bell, Christine Rockley, and Anne Llewellyn**, CSIRO Publishing, 2019.

The Great Barrier Reef: Biology, Environment and Management, by **Pat Hutchings, Michael Kingsford, and Ove Hoegh-Guldberg**, CSIRO Publishing, 2019.

A Guide to Crickets of Australia, by **David Rentz and You Ning Su**, CSIRO Publishing, 2019.

The Last Wilderness: A History of the Olympic Peninsula, by **Murray Morgan**, University of Washington Press, 2019.

Night Parrot: Australia's Most Elusive Bird, by **Penny Olsen**, CSIRO Publishing, 2018.

Plants of the Victorian High Country: A Field Guide for Walkers, by **John Murphy and Bill Dowling**, CSIRO Publishing, 2019.

Underwater Sydney, **Inke Falkner and John Turnbull**, eds. CSIRO Publishing, 2019.

Wildlife of the Otways and Shipwreck Coast: A Photographic Field Guide to the Vertebrate Wildlife of Victoria's South-West, by **Grant Palmer**, CSIRO Publishing, 2019.

Working with the Ancestors: Mana and Place in the Marquesas Islands, by **Emily C. Donaldson**, University of Washington Press, 2019.

ARTICLES and ESSAYS

“An Advocate for Taxonomic Research in Australia,” by **Pat Hutchings**, *Pacific Conservation Biology* 25:1 (2019), 34-36.

“Analyzing the Ecological Niche of Water Quality of Key Species in the Aquatic Ecosystem in Jinan City,” by **S. Yang, X. Pan, C. Sun, S. Shang, C. Zhang, C.S. Zhao, B. Dong, and Z. Zhang**, *Marine and Freshwater Research* 70:5 (2019), 656-669.

“Arc-Related Pyroxenites Derived from a Long-Lived Neoproterozoic Subduction System at the Southwestern Margin of the Cuddapah Basin: Geodynamic Implications for the Evolution of the Eastern Dharwar Craton, Southern India,” by **Abhinay Sharma, Rohit Kumar Giri, N.V. Chalapathi Rao, Waliur Rahaman, Dinesh Pandit, and Samarendra Sahoo**, *The Journal of Geology* 127:5 (2019), 567-591.

“Asian Water Monitors (*Varanus salvator*) Remain Common in Peninsular Malaysia, Despite Intense Harvesting,” by **Syarifah Khadiejah, Norazlinda Razak, Georgia Ward-Fear, Richard Shine, and Daniel J.D. Natusch**, *Wildlife Research* 46:3 (2019), 265-275.

“Assessing Alpha and Beta Diversities of Benthic Macroinvertebrates and Their Environmental Drivers Between Watersheds with Different Levels of Habitat Transformation in Japan,” by **Chia-Ying Ko, Tomoya Iwata, Jun-Yi Lee, Aya Murakami, Junichi Okano, Naoto F. Ishikawa, Yoichiro Sakai, Ichiro Tayasu, Masayuki Itoh, Uthman Song, Hiroyuki Togashi, Shinich Nakano, Nobuhito Ohte, and Noboru Okuda**, *Marine and Freshwater Research* 70:4 (2018), 504-512.

“Australian Processionary Caterpillars, *Ochrogaster lunifer* Herrich-Schäffer (Lepidoptera: Notodontidae), Comprise Cryptic Species,” by **Andrew Mather, Myron P. Zalucki, Julianne Farrell, Lynda E. Perkins, and Lyn G. Cook**, *Austral Entomology* (2019), available online at <http://onlinelibrary.wiley.com>.

“An Awn Typology for Australian Native Grasses (Poaceae),” by **Annette M. Cavanagh, Robert C. Godfree, and John W. Morgan**, *Australian Journal of Botany* 67:4 (2019), 309-334.

“Bait Preferences of Australian Dung Beetles (Coleoptera: Scarabaeidae) in Tropical and Subtropical Queensland Forests,” by **Kathryn M. Ebert, Geoff B. Monteith, Rosa Menendez, and David J. Merritt**, *Austral Entomology* (2019), available online at <http://onlinelibrary.wiley.com>.

“A Baseline Survey of Birds in Native Vegetation on Cotton Farms in Inland

Eastern Australia,” by **Rhiannon Smith, Julian Reid, Laura Scott-Morales, Stuart Green, and Nick Reid**, *Wildlife Research* 46:4 (2019), 304-316.

“Calcium Modulates Leaf Cell – Specific Phosphorous Allocation in Proteaceae South-Western Australia,” by **Patrick E. Hayes, Peta L. Clode, Caio Guilherme Pereira, and Hans Lambers**, *Journal of Experimental Botany* 70:15 (2019), 3995-4009.

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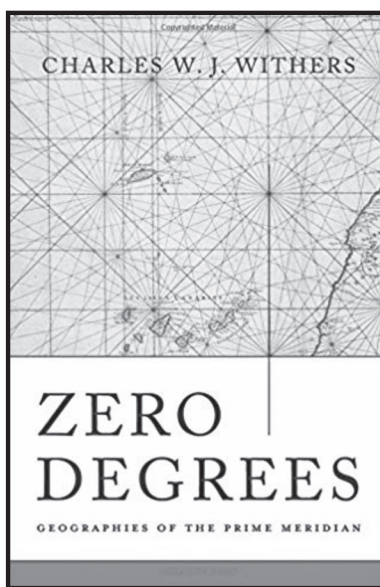
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“Zoonotic and Economically Significant Pathogens of Peri-Urban Wild Dogs Across North-Eastern New South Wales and South-Eastern Queensland, Australia,” by **Lana Harriott, Matthew Gentle, Rebecca Traub, Ricardo J. Soares Magalhaes, and Rowland Cobbold**, *Wildlife Research* 46:3 (2019), 212-221.

BOOK REVIEWS



Charles Withers, *Zero Degrees: Geographies of the Prime Meridian*, Cambridge, MA: Belknap Press of Harvard University Press, 2017. x + 321. B&W Maps. Illustrations. Notes. Index. Cloth US\$29.95 and ISBN 9780674088818.

This is a delightful and thoughtful book by Professor Withers of the University of Edinburgh, who is also Scotland's Geographer Royal. As an artefact, it is also beautifully produced by its publishers.

Longitude lines are the familiar lines that run vertically on a two dimensional Mercator map-projection of the earth's globe or run from one pole to the other on the globe's surface and are perpendicular when they cross the equator. In concert with a latitude line (a line running parallel to the equator), they can specify a location on the earth's surface.

A single longitude line, or meridian, is of no use unless it can refer to another one, thereby enabling a measurement of east/west distance between one line and another. Typically the “Prime” meridian is the reference line of longitude that serves to anchor all others and it is set to zero. All other lines, as they bisect the equator, are measured in terms of the number of degrees away from this zero with the equator usually divided into 360 degrees (or 180 degrees east or west) relative to the zero.

Longitude lines are reliably established by astronomical technologies (e.g. the differences in the local time of an eclipse or transit at two different places will also establish their longitude difference) so as observatories became established tools of state in Europe from the late seventeenth century onwards the prime meridians were set at zero in Greenwich (London), Paris, Cadiz, Lisbon, and Stockholm among many others. Much effort was then placed to carefully measure the longitude differences between these observatories so the “Paris” longitude numbers (for example) could be converted to the “Greenwich” numbers and vice versa.

Withers carefully outlines the somewhat unsatisfactory, but not fatal, state of affairs this multiplicity of prime meridians led to and the solution that was gradually agreed upon in the late nineteenth century to settle upon one prime meridian at Greenwich. Given that the Greenwich Royal Observatory was founded in the 1660s and a fully implemented single prime meridian did not become universal until the 1920s, what took so long and what was decisive in getting to a decision that was then adopted across the globe? Withers gives a scholarly and engaging account of the first question and a subtle answer to the second question. Rationality (of a certain sort) turns out to be of little use in making decisions such as these, as each nation could easily find reasons to favour its main observatory over those of others.

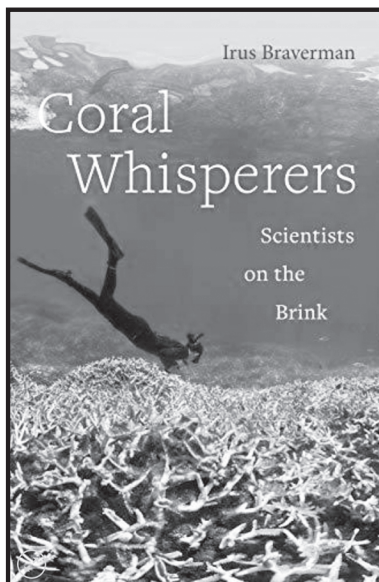
It is here that the Pacific (ocean) puts in an appearance by virtue of its nothingness. One proposed meridian at the crucial international conference on the matter, in Washington DC in 1884, was a meridian that ran from the North Pole, through the Bering Strait and then, fortuitously, entirely across ocean, never once touching land. A similar solution was also offered for the Atlantic with the prime meridian (near the Azores) that only touched a small portion of Greenland. Both these solutions were put forward by the French delegation at the Washington conference as a rear-guard action; if Paris were not to be selected, then better a geographically rational solution than that of Greenwich.

The Anglo-American delegations brushed aside such musings and chose the rationality of practicality and power. Greenwich was overwhelmingly the most commonly used prime meridian for global navigational purposes in the late nineteenth century as reflected in shipping tonnages reliant upon navigational technologies linked to Greenwich (including the widely used British *Nautical Almanac and Astronomical Ephemeris*) and it was this, and the fact that the British and American Empires already used the Greenwich prime meridian, that carried the day. Indeed, the British delegation noted that they could not “entertain ... [any other] proposal ... it is not a question open for discussion as far as England is concerned” (p. 176).

Such days of English power are long gone and Withers notes that even the

zero longitude line established by the transit instrument at Greenwich has had to be moved; the assumed verticality of the instrument is not quite the case and it is an American and Russian technology, the rocket launched satellite, that has moved the prime meridian a hundred meters or so away from that of 1884. However, there is still only one prime meridian and that has proven to be a most useful invention.

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Irus Braverman, *Coral Whisperers: Scientists on the Brink, Critical Environments: Nature, Science, and Politics, 3*, Berkeley, CA:

University of California Press, 2018. xi + 332.

Paper. Cloth. eBook formats. Index. Notes.

B&W Photos. Paper ISBN 978-0-520-29885-9 and 9780520298859.

What action as a scientist would you take if the organism(s) you were studying began to disappear from the environments in which you were studying them? This is the conundrum that coral reef biologists are facing today. Coral reefs are some of the most diverse ecological habitats on

the globe, yet all over the world, the corals that make up the reef are bleaching and dying and the reefs they are part of are losing their diversity and productivity.

Irus Braverman in five information-packed chapters describes the situation, the causes, the solutions and possible long-term outcomes of the disaster that is currently taking place in coral reefs. Interspersed between the chapters are six detailed interviews with prominent coral reef biologists; these interviews done in person, via e-mail or via Skype.

There seem to be two possible approaches that coral reef biologists take. The causes of bleaching and death of corals are complex, but in general are related to two factors: the warming of the oceans and increasing acidity of the ocean waters. These two factors are in turn related to global climate changes, which are related to the anthropogenic increases in carbon dioxide (and to a lesser extent

methane). Thus, because these causes seem to be beyond their control, some reef biologists throw up their hands and essentially just monitor the losses. On the other hand, other reef biologists believe that they perhaps can moderate or ameliorate the transformation of the reefs, by both finding coral species that may not be as affected by the increased temperatures and acidity and/or by genetically modifying their species of interest and planting them back into the coral reef environment. This second tack is difficult, as coral reef species are controlled by a number of international restrictions related to collection and distribution, necessitating diligence in getting permits to try these in situ experiments. Often the two groups of coral reef biologist are at loggerheads with each other, which Braverman describes through notes taken at international meetings of the biologists.

The author does not focus on one location in the ocean in the interviews and chapters. Rather, the Great Barrier Reef, the Hawaiian reefs, and the reefs of the Caribbean are explored with respect to research being done on them and to a certain extent get equal treatment in both the chapters and in the interviews.

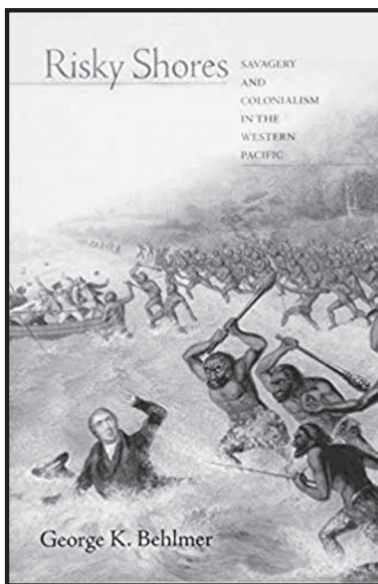
The six interviews are with individuals who fit into both of the above categories: scientists who monitor and others who work to ameliorate, or solve. The most pertinent is with Ruth Gates, former head of the Hawai'i Institute of Marine Biology (HIMB), which is located on Coconut Island in Kaneohe Bay, Oahu, and is part of the University of Hawai'i. The fact that this interview is included in the book is fortunate, as Dr. Gates died at the age of 56 on October 18, 2018 following complications from an operation she had just undergone. Many readers might recognize Dr. Gates from the role that she played in the video, *Chasing Coral*. That video described some of the work that she and her colleagues were doing to produce a super coral, one that be able to withstand the transformations taking place in the tropical oceans. In the book interview (done via Skype and during the author's visit to HIMB), Dr. Gates answers in detail a number of questions posed by Braverman. In the concluding section of the interview, Dr. Gates indicates that the total death of the coral reef and its inhabitants is a "dirty lie." They may be massively degraded, but if we lose hope, there is no chance that by our action we might be able to remediate the situation. Losing hope means walking away from the situation, something that Dr. Gates hoped would not happen.

The book is illustrated with black and white photos. A nice component is that each chapter includes a full-page image of either a coral or some aspect of a coral organism. The latter part of the volume includes notes, organized by chapter, a listing of all the folks that she interviewed with the dates of the interviews and how the interview was accomplished, and a useful index.

Although the reader might experience a bit of despair in reading this volume, the author has done an excellent job of examining the polarity of beliefs of the coral

reef biologists demonstrate. She has done this in a volume that is readable both to the non-scientist and to professional biologists interested in the question of the future of coral reefs and corals. Although the *Chasing Corals* video came out as Braverman was finishing her book, this book represents a more in-depth treatment of the situation and the notes in the sources chapter allow individuals to follow up on different aspects of the problem. The title provides some intrigue, but I thought that animal whisperers were able to get the animals they whispered to, to do things that another person might not be able to get the animal to do. I don't think any amount of whispering to a coral will get it to behave better in its environment. Even with that thought, I highly recommend this book to all readers.

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George K. Behlmer, *Risky Shores: Savagery and Colonialism in the Western Pacific*, Stanford: Stanford University Press, 2018, Maps. Illustrations. xiv + 338. Notes. Index. B & W Photographs. Paper and eBook Formats. ISBN 978-1-5036-0594-7 and 9781503605947.

George Behlmer's expansive *Risky Shores: Savagery and Colonialism in the Western Pacific* addresses fascinating issues and raises many important questions, both directly and indirectly. The depth of his research means that the book will serve as a point of reference for scholars of the Pacific for years to come. The sources he reveals

and the questions he raises also open up multiple avenues for future work, and scholars may also wish to build on his research by considering the issues that he only raises obliquely. *Risky Shores* made me think more deeply about what constitutes "murder" and justifiable violence; the problems of archives, knowledge, and bias; how difficult it is for today's scholars to avoid the perspective and language of colonizers; the issue of when and for whom "history" happens; and the interconnectedness of local colonial encounters, economics, the environment, and European geopolitical concerns. The work will be useful for college and university

instructors at all levels as well as for researchers in history and anthropology.

One of the most profound questions that the book raises is what constitutes “savagery” – that is, unacceptable violence or brutality – among both people the British understood as “primitive” and by British colonists and colonial officials. Indeed, it is a key argument of the book that the British were often as concerned about the depredations of their own emigrants as about the actions of indigenous peoples. Behlmer begins his history of colonial encounters in the Western Pacific with a discussion of the historiography and debates over the nature and even existence of cannibalism (Chapter 1), which was often seen as the most “savage” of “savage” customs. He delicately balances this debate by acknowledging that the practice could both be real and be something that different people used rhetorically. This is a key point throughout the book: the variety of competing practices, interests, and historical agents involved when we discuss “colonialism” and/or “imperialism,” and how this affects both the historical record and our critical approach to it.

For instance, the relatively few colonial officials representing the interests of the British or Australian governments over vast swaths of territory were often at odds with the desires of settlers, planters, and missionaries, who in turn often disagreed with each other. Moreover, it was often in the interest of explorers and missionaries to rhetorically heighten the savagery of the peoples they encountered or hoped to convert, by publicizing practices like cannibalism (e.g., 44, 50). At the same time, people like the Fijians used cannibalism as an anti-colonial strategy: as he writes, “once these folk realized the white man’s dread of cannibalism, they began exaggerating their own fondness for *bakola* [bodies]” (56). Meanwhile, opponents of expanding indentured labor recruitment for the new plantations of coconut, sugar cane, and cotton wielded the language of savagery and invited comparisons to the abolished Atlantic slave trade (Chapter 2).

A closely related recurring question revolves around criminal “murder,” traditional forms of cannibalism and headhunting warfare, the labor trade, and, as Behlmer summarizes one set of colonial documents, “state-sponsored violence” that was “regrettable but necessary” (227). What kinds of European violence or incursions provoked Islander “outrages” at the “interface of ship and shore” (134) and how and when did the Royal Navy use collective violence to punish these (e.g., 137)? Would juries of their peers hold recruiters accountable for violence against indentured or even kidnapped Islanders (e.g., 141)? Would courts accept Islander testimony in such cases (e.g., 142-3)? Behlmer investigates these questions and the complexities of the inter- and intra-colonial politics and personalities in revealing depth and detail, and his narrative helps explain how and when events reached Britain that then prompted legislation or changing colonial policies (146). These

examples provide a thought-provoking examination of the reach and rule of law in colonial contexts. For many colonial officials, the expansion of the rule of law was the essence of British governance, but competing interests made this difficult in terms of legislation, authority, and enforcement; neither the labor recruiters nor the headhunters necessarily accepted such legal regimes.

The debate about murder and the rule of law gets to the heart of the colonial enterprise and the expansion of European settlement and trade, and the requisite violence that accompanied these. By what right or interest were the British and other Europeans in this part of the world at all? It is here that Behlmer quietly weaves in a much larger geopolitical struggle happening in the background, and which for understandable reasons is not central to the book: the threat of German expansion into the South Seas that provoked British territorial claims, what Behlmer calls “preemptive colonization” (180); German Papua New Guinea and later Australian interests would drive a desire to settle that territory (222), and the economic and military threat of Japan would further drive British efforts there (242, 250). Late nineteenth-century British colonization of the Solomon Islands officially took place to regulate the labor trade and control the savagery of both the labor recruiters and the headhunters.

However, the presence of numerous competing European economic interests could also serve to dampen the effectiveness of such regulation; for instance, British attempts to curtail the outrages of the labor trade through the 1872 Kidnapping Act “made it a felony for British subjects to decoy, carry away, confine, or detain without his or her consent, any native of an uncolonized Pacific Island” (146), but this inspired many ships to simply switch to registering as French. Here is the pattern of so much capitalist, imperialist expansion: the colonial government bowed to pressure from advocacy groups and the need to rein in violence provoked by settler and trader abuses, but at the same time wished to both expand its territorial footprint and its balance of trade. Meanwhile, as Chapter 3 makes clear, the labor trade itself, by supplying guns to indigenous recruiters, had created new levels of violence in traditional practices like headhunting. (Later, after Australian independence in 1901, racial fears would change the question of regulation and labor recruitment again, with whites-only immigration policies [152].)

While Behlmer frequently alludes to both the quality and nature of the historical record, and actively engages with a wide range of scholarship, I found myself wanting to know more about how he understood and delimited his archival base. While sources obviously appear in the endnotes, and his analysis makes the relative biases of these clear, the scope of this work is so broad, and its problems and questions so big, that more foregrounding of his system and methodology would have been helpful. In a similar vein, Behlmer is quite clear that he is trying

to find a balance between traditional, revisionist, and post-colonial accounts in terms of interpreting European motivations and Islander agency from what are almost exclusively European sources. Yet I found that one of the implicit questions he raises is that of his own analytical perspective and choice of language relative to those sources. It can be very difficult for historians not to take on their subjects' rhetoric, and on occasion I found it hard to parse whether his use of words like "taming" (e.g., 196), "pacifying" (e.g., 20), or "primitive" (e.g., 211), without scare quotes, was unconscious or deliberate.

Beyond his language, the story that Behlmer tells, for this reader at least, raised the problem of colonialism itself: by what right were the British establishing their laws in places across the world, putting people to death for murder, or making areas safe for settlers (e.g., 196)? Were the Kukukuku people not justified in defending their land from encroachment of miners and others (223)? In the end, the answer that he provides seems to be that the British were there for strategic reasons, aware that if they did not take it, another European power would. In that sense, this book gives us a sense of the "Scramble for the South Pacific," a topic that clearly deserves greater recognition in survey courses.

For its extraordinary wealth of research, for the deftly chosen examples and the effective interpretation of these within a larger historical framework, this is essential reading for those interested in this part of the world or in the power structures and mechanisms of imperialism.

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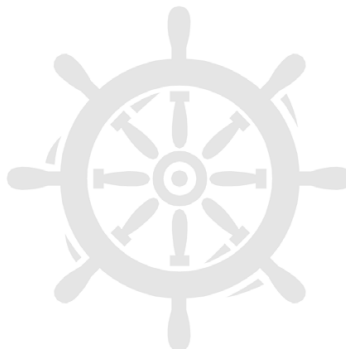
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