

THE PACIFIC CIRCLE



April 2015

BULLETIN NO. 34

ISSN 1520-3581

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PACIFIC CIRCLE NEWS

Business Matters

The Circle's email address is thepacificcircle@gmail.com. Please contact the Editor and/or Editorial Assistant should you have any questions, concerns or requests.

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 rate for individuals is US\$25.00 and for institutions, US\$35.00. Thanks for your attention to this matter.

A friendly reminder: our web site is up and running for past issues, documents from conferences, links to affiliated and complementary groups and a blog with information about events and publications.

Please visit: <http://thepacificcircle.com>

Publications, Honors & Scholarly Activities by Circle Members

Congratulations to:

Antony Adler for the publication of "The Capture and Curation of the Cannibal 'Vendovi:' Reality and Representation of a Pacific Frontier," *Journal of Pacific History* 49:3 (2014), pp. 255-282;

Michelle L. Aldrich and Alan E. Leviton for the publication of *Pacific Division, AAAS, A Brief History*, 4th edition, 16 pp. and illustrations (portraits);

Warwick Anderson for the publication with Ian R. Mackay of *Intolerant Bodies: A Short History of Autoimmunity*, Johns Hopkins University Press and for the 2014 Derek Price/Rod Webster Award at the History of Science Society meeting. The Award is in recognition of excellence in a research article published in *Isis*. Warwick's prize-winning article was: "Hybridity, Race, and Science: The Voyage of the Zacca, 1934-35," *Isis* 103 (2012), pp. 229-253;

Rainer Buschmann for the publication of *Iberian Visions of the Pacific Ocean, 1507-1899*, Palgrave Macmillan, 2014;

Jonathan Coopersmith for the publication of *FAXED: The Rise and Fall of the Fax Machine*, Johns Hopkins University Press, 2015, which includes the significant roles played by Japanese firms and government agencies in faxing;

Gregory T. Cushman for earning "The Jerry Bentley Prize" from the American Historical Association for *Guano and the Opening of the Pacific World: A Global Ecological History*, Cambridge University Press, 2013;

Jacob Darwin Hamblin for earning "The Paul Birdsall Prize" from the American

Historical Association for *Arming Mother Nature: The Birth of Catastrophic Environmentalism*, Oxford University Press, 2013;

Roderick W. Home for publication of “Ferdinand Mueller’s Alpine Itinerary,” *Historical Records of Australian Science* 25 (2014), 1-17 and “The University of Melbourne Department,” in Brian Ellis, R. Home, et al., “History and Philosophy of Science,” *A History of Philosophy in Australia and New Zealand*, Springer, 2014, 707-772, esp 711-717;

Michael Osborne for the publication in 2014 of *The Emergence of Tropical Medicine in France*, The University of Chicago Press, which “examines the turbulent history of the ideas, people, and institutions of French colonial and tropical medicine from their early modern origins through World War I”;

Michael Chauvin for the publication of *The Learn’d Astronomer*, Mauna Kea Books, 2015.

CONFERENCE and TRAVEL REPORTS

“A Summer in China”

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In the summer of 2014 I had the opportunity to spend more than two months (June 21-August 25) traveling, lecturing (on American and Chinese science policy), and conducting research (on Chinese American scientists) in mainland China and Taiwan and here is a brief report on some of my experiences and observations.

My first stop in the mainland was Changsha where I gave, in late June, several lectures on American science and technology policy at the National University of Defense Technology there. They were attended by about twenty graduate students and young teachers in its history and philosophy of science and technology program, many of whom are naturally interested in the history and policy related to American military technology. Professor YANG Aihua (Chinese family names are capitalized in this note), who hosted my visit, is a specialist on the history of Sino-Soviet relations in military technology and would later come to the U.S. as a visiting scholar with me at Cal Poly Pomona for the 2014-2015 academic year. The NUDT, known internationally for its supercomputing prowess, traced its origins to the famed Harbin Institute of Military Technology, which was founded with Soviet assistance in the early 1950s, and relocated to Changsha in 1970 amidst the Cultural Revolution.

Then in early July I taught a short summer course on modern American

history at the University of the Chinese Academy of Sciences in Huairou, a suburb of Beijing, with more than two hundred science and engineering graduate students in the class. In the online discussion forum for the class, students provided, somewhat to my (pleasant) surprise, very thoughtful reflections on the readings and documentaries, especially on the Cold War and the civil rights movement.

The scenic UCAS campus in Huairou is on the northern edge of the beautiful Yanqi Lake, which was later used as the site for the Asian Pacific Economic Cooperation (APEC) summit meeting in November 2014. It boasts a view of segments of the Great Wall on mountains to the north. It was also within walking distance to some of the sites used by the academy during the early days of the Chinese space program. I had received my master's degree in the history of science from the school in 1985, which was then called the Graduate School of the CAS, at its original site in western Beijing which is still in use.

From Huairou I traveled to Hefei in the southern Anhui province where I gave another short introductory course on the history of modern science and technology as practiced in the west/U.S. at the University of Science and Technology of China. My host for the visit was Professor SHI Yunli, an expert on the history of Chinese astronomy and chair of the Department for the History of Science and Scientific Archeology. My lectures were attended by about two dozen graduate students and junior faculty members, many of whom studied the history of science and technology in modern China and all of them engaged in spirited discussions with me in and out of the classroom. I also had a chance to visit the university's archives for research related to my project on Chinese American scientists. The USTC, like the UCAS, is part of the Chinese Academy of Sciences.

From August 9 to 15, I attended a conference on modern Chinese history at the Institute of Modern History of Academia Sinica in Taipei (co-sponsored by the Historical Society for Twentieth Century China) where I gave a talk on Chinese American scientists and Taiwan. The conference on "Modern China in Global

Historians with interests in science and technology in modern China attending the conference on "Modern China in Global Context" in Taipei, August 2014:

1st row (from left): Zuoyue Wang, Yu-ling Huang, Fa-ti Fan, Megan Greene, Steven Phillips;

2nd row: Xueqian Zhang, Hsiao-Pei Yen, Lijing Jiang, Wendy Fu, Mary Brazelton, Chen-Pang Yeang, Shellen Wu;

3rd row: Sean Hsiang-lin Lei, Arunabh Ghosh, Seung-Joon Lee, Hsien-Chun Wang, Marlon Zhu



Context, 1600-Present” offered the opportunity for one of the largest gatherings of scholars who are interested in science, technology, and medicine in modern China. My panel was titled “Expertise and Exchanges: Evolving Relations between the Chinese Nationalists and the U.S. in the Twentieth Century” and my fellow panelists were Lijing JIANG (on Chinese-American biological exchanges), Megan Greene (U.S. technical advisors in WWII China), Steven Phillips (Nationalists and U.S. on Burma in Cold War), and Yu-ling Huang (American behavioral scientists in 1960s Taiwan). I also conducted research on the topic at the institute’s rich and well-organized archives. It was my first trip to Taiwan and it made a very good impression on me. I returned to Beijing for the last leg of my trip.

Finally, at various points during my stay in Beijing I gave the following public lectures: on the formation of a Chinese ethnic global scientific community at the Physics Department of the Capital Normal University, hosted by Professor YIN Xiaodong, historian of physics; on the roles of Chinese American scientists in Taiwan’s science and technology policy-making at the Institute of Scientific Information of the Chinese Ministry of Science and Technology, hosted by its associate director Professor WU Yishan, a scientometrics scholar; on U.S. science policy under Obama at the Chinese National Natural Science Foundation, hosted by Dr. GONG Xu, a specialist on U.S. and Chinese science policy; and on the history of China-U.S. scientific exchanges, especially the history and importance of China-U.S. collaboration on climate change, at the Institute for the History of Natural Sciences (IHNS) of the Chinese Academy of Sciences, hosted by its director Professor ZHANG Baichun, an expert on Chinese-western technological interactions. The last received especially wide publicity, including a report on the website of *Guangming Daily*, a major national newspaper, and was recorded for viewing online by the media site www.wxgbt.com.

In Beijing I also conducted oral history interviews, with the assistance of Professor XIONG Weimin of the IHNS, with two Chinese scientists who had returned from the U.S. in the 1950s: Professor WU Dachang, 96, of the Beijing Institute of Technology, and Professor ZHENG Zhemin, 90, of the Institute of Mechanics of the Chinese Academy of Sciences. These interviews provided valuable information and insights for my current project to study the transnational history of Chinese American scientists, both those who had, like Professors Wu and Zheng, returned to China and those who decided to stay in the U.S. in the 1950s.

I had first met Professor Wu at a gathering of several scientists and scholars who had returned from the U.S. in the 1950s. The gathering was organized by and



Zuoyue Wang giving a public lecture on the history of China-U.S. scientific exchanges at the Institute for the History of Natural Sciences, Chinese Academy of Sciences, Beijing, August 22, 2014

held at the Great Wall Institute, a successful consulting firm in Beijing founded and headed by my old friend WANG Delu. Delu was originally trained as a physicist and historian and philosopher of science. In the 1980s Delu and Kathleen Dugan, an American historian of science teaching then in Beijing at the CAS graduate school (I took English and history of science classes with her), had conducted oral history interviews with several dozens of Chinese scientists who had returned from the U.S. in the 1950s. He then went into business but recently returned to his original scholarly interests and published a valuable book of some of these interview transcripts in 2013.

Wang Delu's book was part of a remarkable boom in China in publications related to oral history and other primary source materials for the history of science and technology in modern China. Beginning in 2010, a massive multi-year project to document the life histories of hundreds of senior scientists and engineers in China in the form of oral history interviews and primary sources materials (manuscripts and photos) was launched and funded by the official China Association for Science and Technology. The project is under the leadership of Professors ZHANG Li, a respected historian of modern chemistry of China at the IHNS, with Professor FAN Hongye, a senior researcher in the Institute of Policy and Management of the CAS and perhaps the most venerated historian of modern Chinese science in China, serving as the chief advisor. It has already produced dozens of scientific biographies and a major traveling exhibit. It also aims to establish a national museum on the history of modern science in China to house the numerous primary source materials it has amassed.

There has also been a rise of attention to the history of modern science in China from documentary TV producers. On the last day of my trip in China, I was interviewed by producers from the China Central Television (CCTV) who were making a documentary on the return of the famous Chinese rocket scientist H.S. Tsien (Qian Xuesen) from the U.S. to China in 1955. Later, upon my suggestion, the producers decided to expand into documentaries on other Chinese scientists and engineers returned from the U.S. in the 1950s.

This trip to mainland China and Taiwan reinforced my impression that the field of the history of science and technology in modern China, especially the post-1949 period, while still facing many obstacles, is experiencing a dramatic increase in both the quality of scholarship and the quantity of accessible primary sources. With new attention to the transnational dimensions of this history, one can hope to see an improved understanding of the history of modern science and technology not only in China but in the rest of Asia-Pacific region and the world as well.



Conference on “Material Encounters”
National Library of Australia (sponsored by ANU)
February 4-6, 2015
Conference Organizers: Bronwen Douglas and Chris Ballard.

Readers of *The Pacific Circle* will be well aware of the increasingly important role which the study of material cultures is playing in exploring the dynamics of cross-cultural contact. This conference, then, addressed a very current and potentially fertile theme. Its organizing theme was the materiality of knowledge produced through personal encounters with people and places – in charts and maps; journals, letters, and reports; sketches, paintings, and photographs; artifacts and other objects; human and animal remains; legends, cartouches, captions, labels, marginalia, and notes. The themes addressed are of particular concern to those studying the history and cultures of the Pacific. Issues raised included the link between forms of indigenous knowledge and material objects; classification of material objects; the way in which the diffusion of material objects can both challenge and reaffirm the sense of place with which such objects are linked; and the materiality of the texts, images, and things through which we seek to know other times, places, and worlds.

As befits such a wide-ranging set of enquiries the conference offered perspectives from a range of disciplines: the first keynote, the cultural geographer, Felix Driver (Royal Holloway College, London) demonstrated how the illustrations kept by naval officers offered a potentially rich resource for studying both the European cultures from which they emerged and the indigenous cultures which they depicted; the other keynote, Richardo Roque (Institute of Social Sciences, Lisbon), addressed the complex issue of the practice of storing human skulls in museums and the significance of the way in which such objects are arranged and classified with a particular emphasis on the markers of place. The public address by Philip Jones of the South Australian Museum also addressed major museological themes drawing on his lifetime knowledge of this museum to illustrate more general points about the interrelationship between objects, the cultures which produced them and the way in which they are interpreted and presented by museums. An appreciation of the impact of the depiction of objects can extend to the way in which historical representations are artistically reinterpreted: as the artist/historian, Nicola Dickson, showed with her discussion of her own artistic responses to the drawings of Jean Piron from the d'Entrecasteaux expedition.

Space forbids a more extended discussion of the diverse range of papers offered, many on Pacific themes, all of which, in their different ways, added nuance and insight into our appreciation of an increasingly important theme: the appreciation of what material objects and the concept of materiality can add to our understanding of both the cultures from which they emerged and the cultures which collected them.

For titles and abstracts, please visit:

<http://chl.anu.edu.au/news-events/conferences/details/211/material-encounters>

—John Gascoigne, President, *The Pacific Circle*

HSS NEWS
FUTURE MEETINGS, CONFERENCES and
CALLS FOR PAPERS

24-27 June 2015. 10th Conference of the European Society for Oceanists (ESfO), to be held in Brussels, Belgium. For information, please visit:

<http://esfo-org.eu/previous-conferences/2015-brussels-conference/>

2-5 July 2015. Annual Conference of the British Society for the History of Science, to be held at Swansea University, Wales. Questions? Visit:

<http://www.bsbs.org.uk/conferences/annual-conference/2015-swanea>

14-18 July 2015. Conference on “Sustainable Sea Transport Talanoa,” to be hosted by the University of the South Pacific. The meeting will address themes of heritage revival, Pacific voyaging and sea transport technology. For information about papers and panels, please visit: <https://www.usp.ac.fj/index.php?id=14096>

9-11 September 2015. 5th Congress of Asian and the Pacific Studies, to be held at the Institut national des Langues et civilisations orientales, Paris. The objectives of the Congress include building awareness about research on Asia and the Pacific, promoting scholarly exchange and collaboration, and encouraging international projects. Doctoral candidates and young researchers are particularly encouraged to submit proposals. The panels will be conducted in French or in English. For additional information, please visit: <http://congresasie2015.sciencesconf.org/?lang=en>

BOOK, JOURNAL, EXHIBITION and RESEARCH NEWS

“Intersections: Science and Technology in Twentieth-Century China and India” is the subject of the inaugural issue of *BJHS Themes*, a new open access, edited-collection of the British Society for the History of Science. Jahnvi Phalkey (King’s College London) and Tong Lam (University of Toronto) will co-edit the publication, expected in January 2016.



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Expedition into Empire: Exploratory Journeys and the Making of the Modern World, ed. **Martin Thomas**, Routledge, 2015 includes several chapters of possible interest to Circle members: Bronwen Douglas, “Expeditions, Encounters, and the Praxis of Seaborne Ethnography: The French Voyages of La Perouse and Freycinet,” pp. 108-126 and Tom Griffiths, “A Polar Drama: The Australasian Antarctic Expedition of 1911-1914,” pp. 171-193.

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“The Spatial Pattern of Grassland Aboveground Biomass on Xizang Plateau and its Climatic Controls,” by **Yanbin Jiang**, **Jian Tao**, **Yongqi Huang**, **Juntao Zhu**, **Li Tan**, and **Yangjian Zhang**, *Journal of Plant Ecology* 8:1 (2015), pp. 30-40.

“Three New Meiofaunal Solenogaster Species (Mollusca: Aplacophora) from the North-East Pacific,” by **Kevin M. Kocot** and **Christiane Todt**, *Journal of Natural History* 48:45-48 (2014), pp. 3007-3031.

“Tree Growth and Intrinsic Water-Use Efficiency of Inland Riparian Forests in Northwestern China: Evaluation via and Analysis of Tree Rings,” by **Xiaohong Liu**, **Wenzhi Wang**, **Buobao Xu**, **Xiaomin Zeng**, **Guoju Wu**, **Xuanwen Zhang**, and **Dahe Qin**, *Tree Physiology* 34:9 (2014), pp. 966-980.

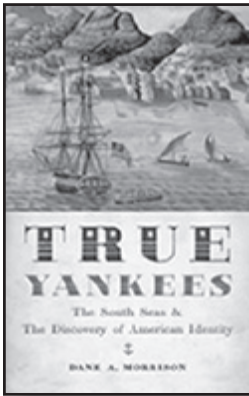
“Two New Fossil Wasps (Insecta: Hymenoptera: Apocrita) from Northeastern China,” by **LongFeng Li** and **ChungKun Shih**, *Journal of Natural History* 49:13&14 (2015), pp. 829-840.

“Two New Nematodes, *Pseudelzalia longista* gen. nov., sp. nov. and *Paramonohystera sinica* sp. nov. (Monhysterida: Xyalidae), from Sediment in the East China Sea,” by **Tingting Yu** and **Kuidong Xu**, *Journal of Natural History* 49:9&10 (2015), pp. 509-526.

“Vaccination and the Politics of Medical Knowledge in Nineteenth-Century Japan,” by **Daniel Trambaiolo**, *Bulletin of the History of Medicine* 88:3 (2014), pp. 431-456.

“Variation in Pollen Limitation and Floral Parasitism Across a Mating System Transition in a Pacific Coastal Dune Plant: Evolutionary Causes or Ecological Consequences?” by **Sara Dart** and **Christopher G. Eckert**, *Annals of Botany* 115:2 (2014), pp. 315-326.

BOOK REVIEWS



Dane A. Morrison, *True Yankees. The South Seas & the Discovery of American Identity*, Baltimore: Johns Hopkins University Press, 2014, pp. xxii+257, Illustrations. Notes. Index. Hardback US\$34.95 and ISBN 978-1421415420.

Famously, for Frederick Jackson Turner, the crucible for the development of American national identity was the westward expansion across the vast continent. In this book Dane Morrison discerns the beginnings of an American identity in an earlier period of American history by focusing more on the sea than the land through the maritime expansion outwards of the post-Revolutionary and ante-bellum early United States republic. This was still an Atlantic-based society and their ships had to head east. Most of them traveled to Europe – though this is not an aspect of the maritime expansion to which this work devotes much attention. The focus, rather, is on the American traders and travelers who, having headed south eastward into the Atlantic, rounded Cape Horn and then turned to the Pacific and the Orient. Travel into what, from an American perspective, were such exotic climes, and contact with different peoples and cultures prompted the infant republic to define what it meant to be American – such is the central contention of this attractively written work.

What helps to give the book pace and human engagement is the way in which it is largely based around the lives and travels of a number of key individuals representing different periods and dimensions of what it meant to be what the book’s title terms a ‘true Yankee.’ The early republic is represented both by the merchant, Samuel Shaw, and his quest from 1784 to 1794 for Chinese and Indian goods which would appeal to his countrymen. Another representative of the pre-Jacksonian period is Amasa Delano with his extensive travels across the Pacific from 1790-1820 in pursuit of seals and other valuables. The circumnavigation of Edmund Fanning from

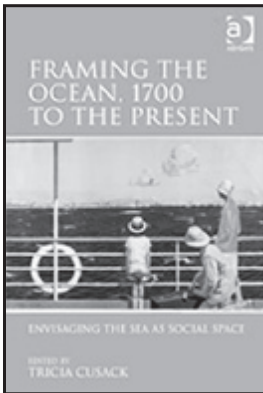
1792-93, by contrast, straddles both the early republic and the Jacksonian period. A very different perspective both in terms of gender and outlook is provided by Harriett Low who traveled with her merchant uncle to Macao in 1829, not returning to the United States until 1834. Finally, a more assertive and self-confident America is represented by the journals of Robert Bennett Forbes and his time in Canton from 1838-40 coinciding with the outbreak of the first Opium War.

Interwoven into the account of these diverse travels with their color and movement the author reflects on what such contact with different peoples tells us about the developing American national identity. Predictably, the theme of the need for the protection of liberty looms large with the rhetoric of the American Revolution coloring the way in which Americans saw the larger world. Himself a participant in the Revolution, Samuel Shaw saw the conflict between the Europeans and the Chinese authorities in Canton as a war for liberty and the Chinese empire as a tyranny. On the other hand, Shaw also regarded the Europeans he met in the East as decadent by comparison with the republican virtue of his own native land. Such critiques of Europe were spiced by sectarian prejudice with anti-Catholicism looming large in the accounts of American Protestants in European colonial enclaves. This was particularly so in the account of the Salem Unitarian, Harriet Low. Living the rather cloistered life that her sex dictated her contact with foreigners was limited and she retained many of the attitudes and prejudices of her upbringing. Catholicism, whether in the Spanish form she encountered in Manila or the Portuguese variety in Macao, she regarded as superstitious and lacking in genuine individual piety. Linked to this was an emphasis on the need for education and the removal of ignorance which was a part of the outlook of the early American republic. Low's attitudes also reflect, the author argues, a more self-confident and established America which was far more ready to pass judgment on others from a position of assumed cultural superiority. This was to be marked, too, in the account of Robert Forbes of Chinese civilization and the coming of the Opium Wars in which the United States was portrayed as one of the great powers.

Along with the benefits which the approach based around individual life stories brings in terms of human interest there are also some inevitable drawbacks. The most obvious one is the question of how representative were the particular individuals chosen. For a book with the title, 'True Yankees,' one is sometimes left wondering whether the analysis would have been different if another set of individuals had been chosen. Given the emphasis on national identity, too, another line of approach would be to focus on accounts more specifically aligned with the apparatus of government – would the reports of United States consuls, for example, have provided a different lens through which to examine such issues? It is a contention of the book that the encounter with the Orient and the Pacific was central to defining early American identity. Yet, for most Americans, such regions of the globe were peripheral indeed. When Americans compared themselves with others it was primarily with

the Europeans. To some degree this book provides analysis of such an encounter as Americans met European colonists and traders abroad. Nonetheless, it would have added another dimension if the book could have provided a more extended comparison of the different phases of American national sentiment it discerns with the available literature on changing American perceptions of Europe. This would take further the fruitful approach which this book elegantly explores of mapping national identity through contact with the Other.

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Tricia Cusack, ed. *Framing the Ocean, 1700 to the Present: Envisaging the Sea as Social Space*. Burlington VT: Ashgate Publishing Company, 2014, 302 pages. Color and B&W Illustrations. Cloth ISBN 978-1-4094-6568-3.

The essays in Cusack's collection *Framing the Ocean, 1700 to the Present* are commendable for advancing the reclamation of social history and human culture from the narrower dominions of both marine biologists and antiquarian pirate enthusiasts. Ocean culture is at once varied and pervasive, and we have been shaped by, and now shape, the ocean realm. For many reasons we need to more fully understand our role as maritime stewards of this planet, and this includes our historic and cultural legacy. In *Framing*, the socially-constructed ocean is perceived through the lens of artistic works broadly defined. The initial collection of short yet widely varied essays was compiled from a 2011 art history conference session, and here includes topics from marine paintings and charts to graphic satire to coral species to advertisements for cruise ships. This eclecticism is both an asset and a challenge, for the subject is as fluid as the sea itself, seeming to flow into any available space. That is the nature of the maritime.

The introductory chapter and division of the work into four themes help provide organizational structure. In "Exploring the Ocean: Colonial Crossings," author Carla Lois demonstrates the manner by which nautical charts *naturally* transcend national boundaries. Emily Burns finds echoes of this transnational nature in the identities of Atlantic steamship passengers. And finally, Elizabeth C. Childs focuses on the border of the beach itself, specifically on portrayals of Captain Cook in the

culturally-charged setting of Kalakaua's Hawaiian Kingdom. Colonial definitions are challenged, their borders clearly fluid.

In the section on "Ships as Microcosms of Society," *Framing* steps back a bit from the sea and seeks its art from the vessel itself, the platform/lens through which all voyagers find the ocean. Sarah Thomas offers the reader a glimpse of life on board a ship-of-the-line, where the Royal Navy intentionally replicated established traditions (e.g. church services, downtime) despite the aquatic environment. Geoff Quilley's article argues more generally for the ship as liminal space, featuring well-familiar tropes of Jack ashore and the sailor as "Other." Erik Gilbert shows how we judge other seafarers by our understanding (and misunderstanding) of their ship construction, in this case Arab *dhow*s. Categories of vessels are *also* socially constructed. And Adam Weaver carries this constructed vessel space into the modern cruise industry. Clearly, seagoing vessels are paramount, perhaps the most complex cultural objects built by humans.

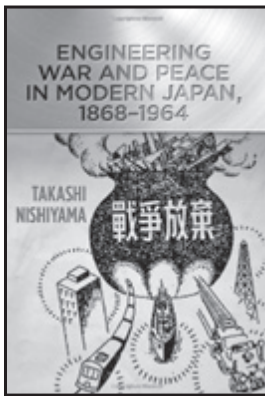
"Narratives of Shipwrecks, Rafts, and Jetsam" brings the cultural analysis to the large body of our folklore and our fears, and is to be congratulated for raising the tip of this oceanic iceberg. Carl Thomson begins by examining the challenge posed by marine tragedy to the officer's world of order and discipline. Kirstie North then extrapolates on the cultural and artistic nature of the *place* of the shipwreck itself, coming the closest to directly portraying an ocean location as physical cultural space with meaning. Yvonne Scott expands gracefully on the wreck as art, raising archaeology beyond just the anthropological interpretation of the past. The transition to Pam Longomardi's article on plastic flotsam is a bit rough, but continues the theme of marine material as art, in this case in the service of environmental awareness.

Finally, "Natural and Unnatural Histories: Ocean Imaginings" explores the cultural side of marine science through the evolution of biological art. Emily Ballew Neff examines John Copley's "Watson and the Shark," as a visual window into the formerly unknowable depths. Victoria Carruthers and Catriona McAra continue the interpretation with mermaids and the work of Dorothea Tanning. Marion Endt-Jones reveals coral as a marine species of cultural entanglement and meaning. Then Pandora Syperok expands on the ubiquitous coral as a visual sounding board for gender issues in the 19th century. All of these expose important links between what is usually so separated in the world of marine resources, the natural and cultural "sciences."

We may be closer to understanding the ocean (and the seafloor itself?) as a place with cultural meaning, and *Framing*, though extremely eclectic, contains steps in the right direction...but the social space of the sea remains challenging. The ocean is no longer an unknowable void, but neither is it as know-able as land. This compilation sheds needed light as there are very few studies featuring visual arts and the sea. Indeed, the plethora of high definition images of shipwrecks from ROVs and AUVs today features exactly this marriage between art and the human footprint in the sea.

So far, though, there seems little general interpretation of the impact of all these high tech images on the Discovery Channel and elsewhere beyond their “wow” factor. Kirstie North and Yvonne Scott’s articles in *Framing*, among others, are particularly enjoyable exceptions to this.

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Takashi Nishiyama, *Engineering for War and Peace in Modern Japan, 1868-1964*, Baltimore: The Johns Hopkins University Press, 2014, pp. xii + 264. B&W photos. Illustrations. Charts. Bibliography. Notes. Index. ISBN 9781421412665.

Working from the premise that war and technological development are inextricably linked, Takashi Nishiyama sets out to demonstrate that Japan benefited technologically more from its defeat in World War II than its prior victories in wars against China, Russia, and in World War I. Writing from the perspective of the country that lost, Nishiyama’s “proof” lies in what he calls a “technology of defeat” (p. 5), the Shinkansen high-speed railway borne postwar of the experience of former military aeronautical engineers. The author argues that former military engineers transformed the culture of postwar civilian engineering. This is a cultural history of Japanese engineers as much as it is a history of trans-war and post-war engineering. It is an attempt to weave together military and technology histories.

Arguing that the expansion of Japanese engineering education roughly correlates to Japan’s four modern wars – Sino-Japanese War, Russo-Japanese War, World War I, and World War II or Pacific War – Nishiyama begins with an outline of the founding of Japan’s first modern technical schools and universities. He discusses the evolution of engineering education from its post-1868 inception and the positive correlation between increasing numbers of engineering institutions and the perceived importance of engineering to a modernizing Japan. To support his argument, Nishiyama largely relies on details such as the establishment of major universities, number and size of engineering departments and chairs, and the number of graduates in different engineering fields. It is clear that the importance of engineering, at least for the government, was tied to the increasing technological complexity of war, which Nishiyama rightly demonstrates.

What we fail to see beyond a discussion of department sizes is anything related to the development of a culture of engineering in this early chapter.

Chapters two and three focus on the creation of a research tradition in engineering by examining the array of research institutes opened under the auspices of the Japanese military, the Imperial Japanese Navy in particular, and by elite educational institutions, such as Tokyo Imperial University. Among the most important was the Navy Technical Research Institute (NTRI) responsible for research and development in areas such as electronics, shipbuilding, and aircraft. The navy took the lead in basic engineering research. Following the NTRI was the creation of the Aeronautical Research Institute at Tokyo University (1921) and Institute for Naval Aeronautics (1932). The army established the Headquarters for Army Aeronautics (1925) which eventually merged with another research unit to become the Institute for Army Aeronautics in 1935. All were created following World War I and the realization that Japan needed its own engineering research tradition.

From this partial list of institutes, it becomes clear that Japan lacked a unified R&D strategy. Nishiyama makes this point well as he describes army-navy rivalries that went far beyond traditional competition for funding and included things such as hiring away each other's engineers. One result of this rivalry was the creation of two different research cultures; one – the navy's less hierarchical, driven by research and the quest for technological excellence, and the other the army's more rigid, unable to overcome personnel issues with a willingness to outsource research to private firms. Despite the creation of a number of impressive aircraft that dominated the skies for a few years following Japan's attack on Pearl Harbor, inter-service engineering rivalries ultimately undermined Japan's war effort.

Looking to bring culture back into this cultural history of engineering, Nishiyama briefly looks at key naval aeronautical engineers, such as Matudaira Tadashi, Miki Tadanao, and Yamana Masao, who helped move the navy to the forefront of aerial warfare. These are interesting forays that at times read like lists of technological achievements. Nishiyama clearly demonstrates that the navy created a culture of research that in many ways violated Japanese cultural conventions, e.g., lack of age- or rank-based hierarchy, yet we do not see any explanation of why this happened beyond the pursuit of excellence in basic and applied research. Was it simply that in its drive to outflank the army the navy was willing to abandon social and military norms?

Nishiyama's final note on wartime engineering gives life to engineers and nicely connects the wartime and postwar eras. The creation of the *Æka* MXY7 suicide glider, also known as the Ohka bomb, reveals the conflict between creating the most technologically advanced weapon for homeland defense and grappling with the morality of suicide weapons. Most interesting is the discussion of how engineers attempted to incorporate safety mechanisms that allowed pilots to escape this

flying bomb. Ultimately, the navy's research culture worked against the engineers' consciences. Designing too many complex variations of this weapon meant that in the end, simplified production considerations eliminated all safety equipment from the MXY project. In the postwar era many wartime aeronautical engineers sought to erase this disgrace (83) by using their knowledge for peaceful projects that would benefit society. Others left the profession in frustration or committed suicide in shame.

The second half of this book, chapters four through seven, follows wartime engineers in their quest to put their engineering knowledge to use in a very different world. Nishiyama quickly discusses the variety of paths wartime aeronautical engineers took in the postwar era. He details Japan's lack of a postwar brain drain as suffered by Germany, which he rightly identifies as an important factor for Japan's postwar economic and technological miracle, and ultimately focuses on the group of engineers who turned to the Japanese National Railways (JNR) as an outlet for their expertise in aerodynamics, vibration, and material science studies, not to mention assuaging wartime guilt. At times, these chapters suffer from some of the shortcomings of earlier ones, most notably the tendency to list engineering achievements such as the use of naval sonar for commercial fishing, without giving a fuller accounting. The peacetime translation of military technologies is a well-known story in the West; perhaps Nishiyama's brief foray into Japan's lesser-known technological conversions should be seen viewed in this light.

The notion of "technology of defeat" gains significance in Nishiyama's discussion of the postwar adaptation of trans- and wartime aeronautical engineering knowledge and culture to Japan's railways. Immediately after the war, many former military engineers sought to help rebuild a dangerous and largely destroyed national railway network. Former military aeronautical engineers applied their knowledge of aerodynamics and material science to railway engineering. The former wartime engineers' culture and knowledge were not necessarily appreciated by former wartime railway engineers, however. There was alleged favoritism by JNR management toward the newcomers who were considered more innovative than traditional railway engineers. For their part, railway engineers felt that the newcomers lacked any knowledge of railway engineering. Equally, if not more disturbing, some of the cohort of younger former military engineers lacked respect for the railway's traditional age-based seniority system. One such case discussed by Nishiyama is the rivalry at the Railway Technical Research Institute (RTRI) between the senior railway engineer Musashi Kuraji and former navy engineer Matsudaira Tadashi. Disagreeing with Musashi over the cause of a catastrophic derailment, Matsudaira, with the support of JNR, pursued his own parallel research agenda. The institute was split into two camps. The younger engineer proved correct and Musashi eventually retired. Only at this point did the two sides come together ultimately under Matsudaira's leadership. From Nishiyama's discussion it is clear that Matsudaira transferred his wartime expertise and experience to a postwar problem and that

the engineering culture in the RTRI eventually changed. There is, however, no extended discussion of the depth of change in the RTRI. Were changes based strictly on the navy's relaxed research atmosphere? Did age or institution-based seniority completely fade from the culture of the RTRI? Later chapters will reveal that this was not necessarily the case or why.

The final two chapters discuss the transformation of railway engineering from rebuilding Japan's rail system to the national quest to create high speed rail as represented by the Shinkansen. It is clear that former military aeronautical engineers were able to translate their methods and expertise into railway design. Monocoque body construction, vibration and flutter studies, scale model testing, all part of military engineering culture became the norm in railway engineering. Chapter six largely focuses on what Nishiyama calls "opposition movements" and uses former navy engineer Miki Tadanao as his primary example. Guilt-ridden and fearful of Occupation authorities, Miki became a peace proponent and eventually put his aeronautical engineering design methodologies to work for the RTRI where he assumed the mantle of leadership in high speed railway design. The opposition that Nishiyama describes was Miki either ignoring or defying central JNR directives. The most important outcome of Miki's intransigence was the Romance Car developed for private railway Odakyū which ran from Tokyo to Osaka at an average speed of 120 km/hr (145).

Given the centrality of culture change to Nishiyama's argument, this author has to ask which change in engineering culture Nishiyama is attempting to describe. On the one hand, there is clearly a transformation within some laboratories at the RTRI from a more theoretical, mathematics-based engineering approach to more empirically driven methodologies through the use of specialized test equipment, models and the like. Matsudaira and Miki are only two examples of instances where railway engineering clearly benefited from the infusion of wartime aeronautical engineers' ideas and experiences – a research and design culture. Transformations to laboratory culture seem less thorough and at times Nishiyama's evidence appears contradictory. Based on Nishiyama's description of engineering culture in the Institute for Naval Aeronautics one can see a transformation in laboratory culture in the RTRI. Matsudaira brought the navy's less rigid collaborative atmosphere to the railway institute, a clear challenge to the traditional seniority-based system. Miki however, also a former navy engineer, ran a lab that was rigidly hierarchical, based on age, education status, and former military rank. As Nishiyama's primary example of opposition to JNR leadership, perhaps it was his former high rank, demanding and stubborn personality, not to mention war guilt, rather than culture change that led Miki to forge ahead with plans for high speed railway development despite the JNR's disapproval.

Chapter seven opens with an interesting yet unresolved story. At the inauguration of the Shinkansen the president of the JNR, Ishida Reisuke, despite earlier opposition

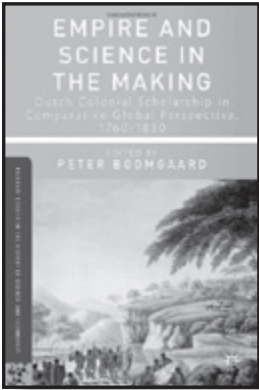
to the project, was there to cut the ribbon. The engineers most identified with the project, Sogō Shinji and Shima Hideo chose not to attend. Their absence is unexplained. Perhaps the anecdote is symbolic of early JNR–RTRI disagreements over the development of high speed rail. What Nishiyama makes clear in this chapter are the technological and organizational hurdles that needed to be overcome in order to bring the Shinkansen project to fruition. Labeled a marriage of convenience (165) Nishiyama unravels the complexity of relations between the JNR and Japanese government through a short discussion of legal and financial issues associated with creating national high speed rail service.

More important to his overarching thesis, Nishiyama claims that it was each engineer's wartime experience that allowed them to overcome the technological obstacles of designing the world's fastest train. Regarding Miki's wind tunnel experiments, Nishiyama states that "Miki drew freely on the intellectual capital [he] had accumulated before and during the war (169)." This is no doubt the case, but this author has to wonder if the former military engineer did not also draw on the intellectual capital accumulated in the more than dozen years following the end of the war working as a railway engineer.

This is a very well researched and documented volume that provides a lot of attention to details about engineers and engineering institutions: birth dates, educational and early career bios, facility sizes, numbers of department chairs, military backgrounds of workers, etc. – that is unavailable elsewhere. It provides significant insight into the creation of Japan's iconic Shinkansen and how military technologies came to bear on this civilian project. Nishiyama's points are well taken although there are times when his evidence seems contradictory or confusing. The description of the RTRI in 1957 as dark, dirty, with 40-year-old test equipment seems contrary to earlier implications of a more modern facility in the hands of former aeronautical engineers. One criticism of this otherwise excellent book is more of the copy editor than the author; it is peppered with grammatical errors and redundancies, nothing major, but annoying nonetheless.

These few comments aside, this is an excellent book that delves into an area of Japanese history heretofore unexplored in English language literature. Takashi Nishiyama is to be commended for his painstaking attention to detail and patience in working for years with informants, former military engineers, who were at times less than cooperative. At the very least, this book will open the door for further study of Japan's engineering communities while illustrating the relationship between war and technological change in modern Japan.

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Peter Boomgaard, *Empire and Science in the Making: Dutch Colonial Scholarship in Comparative Global Perspective, 1760-1830*, Houndmills, Basingstoke: Palgrave Macmillan, 2013, Pp. xiii+302. Index. Hardcover ISBN 9781137334015.

The history of science and medicine in the Dutch colonial empire has tended to focus on a number of unequivocal highlights, such as the work of Jacobus Bontius, who became known through his four-volume *De Medicina Indorum*, which was first published in 1642 and has been described, anachronistically, as the first textbook of tropical medicine; and the discovery by Christiaan Eijkman, in 1899, that the cause of beriberi was a nutritional deficiency (it earned him the Nobel Prize in 1929). One could add the erection of an astronomic observatory near Bandung in 1928, the extensive voyages of Alfred Russel Wallace in the archipelago during the 1850s, and the visits of Margaret Mead and Gregory Bateson to Bali in the late 1930s. In this edited collection, the authors do not focus on important scientific developments or well-known discoveries, but instead examine a specific time period, from 1760 to 1830, and explore scientific activity in the Dutch East Indies during that time. Historians of science have tended to neglect the late eighteenth century (the decades around the Scientific Revolution have attracted most attention), but recently, this century has been described as “the Age of Science,” “the second Scientific Revolution or that of Romantic science,” and “the Age of Wonder” (p. 1). This was the era of the voyages of discovery and the second great age of European exploration, both by land and sea; activities of the British, French, and Spanish Empires have been well documented. The authors contributing to this volume aim to document parallel developments in the Dutch colonies.

During the time period covered by this volume, 1760 to 1830, things were not going particularly well for the Seven United Provinces of the Netherlands. The golden age had passed and a pervasive sense of decline had set in. At this time, the Dutch Republic was “not known for its scholarly excellence” (p. 18) as we are warned in Peter Boomgaard’s introduction. The several small scientific societies and other centers of learning of the Dutch Republic were not particularly interested in the colonies. In 1796, after decades of declining profits, the Dutch East Indies Company (VOC) went bankrupt and both its debts and its territory were assumed by the Dutch state. From 1795 to 1813, the Netherlands was occupied by Napoleon’s armies, which gave the British the opportunity to take over the East Indies (1811-1816). At first sight, the era covered in this volume does not appear to be promising for science. Yet

by focusing on a specific time period rather than particular scientific breakthroughs or a number of great scientists, the contributors to this volume are able to analyze the conditions in the Dutch colonial empire for scientific research, the attitudes of the colonial administration towards investigative activities within its realm, and, generally, the orientation of individuals with scientific interests under normal, rather than exceptional conditions. Focusing on a time period that appears to be unusually unpromising for scientific achievements also provides scholars with an opportunity to observe science in action under more mundane or even adverse circumstances.

In a chapter with the portentous title, “Empire without Science?” Klaas van Berkel provides an overview of scientific activity in the Indonesian archipelago around 1800. He begins by observing that no activities whatsoever were undertaken on the occasion of the 1781 transit of Venus by the Dutch, although he mentions that a German physician took some notes from his veranda just outside Batavia. Other empires equipped extensive scientific expeditions to the areas where this phenomenon could be best observed. In the era of scientific expeditions and renewed scientific exploration, there were no scientific institutions in the Netherlands who could afford to equip one. In addition, the VOC did not really encourage investigative activity amongst its employees, although it did not mind if such activity entertained them as a spare-time one as long as it did not expose sensitive trade information. Only at the tail end of this period, when the Netherlands had been incorporated by France, did investigations in natural history commence again, when the German physician C.G.C. Reinwardt was sent to the Indies to collect as much information about the natural world there as he could. In his essay, Peter Boomgaard provides insight into the few activities that took place in the Indies at the time: in 1778, the Batavia Society of Arts and Sciences was founded, which aimed to foster all kinds of research although it primarily focused on practical applications that promised to further the economic development of the Indies. The Society had several wealthy merchants as members, who contributed to its collections. It also published articles on a great variety of topics, such as anthropology, geography, meteorology, archeology, zoology, botany, and medicine, in its Proceedings. Many contributors, however, were not Dutch; the Indies attracted scientific talent from several nations.

Marieke Bloembergen and Martijn Eickhoff detail archaeological activities in the Dutch East Indies, which received a significant boost during the tenure of Thomas Stamford Raffles as lieutenant-governor of the Indies when it came under British rule in 1811. Raffles promoted archeological research, which, according to him, indicated the contrast between enlightened British rule and the earlier mismanagement of the colonies by the Dutch. Both Dutch and English commentators theorized that the great monuments of Central Java – the Borobudur and the Prambanan temples – had been built by an advanced and intelligent ethnic group, which were unrelated to the Javanese, and which, for unknown reasons, had completely disappeared just after they finished building both temples. The grandeur of both temples therefore reflected

the accomplishments of European archeologists rather than the architectural skills of the Javanese. Michael Laffan focuses on the investigation of Islam in the Dutch East Indies, a topic one would expect to be of interest to colonial administrators given its relevance to the large population under their rule. Yet, they showed little interest in Islam and made only a small number of condescending comments about it. The VOC had never encouraged missionary activities in the Indies because these might interfere with trade. Laffan describes how, despite that, a number of missionaries displayed a keen interest in the various languages spoken in the archipelago because they wanted to deliver the good news of the gospel in the languages spoken there. The earliest research conducted in various Indonesian languages was conducted by these missionaries.

The most daring essay in the volume is written by Gerry van Klinken, who wonders whether there was, or whether there could have been, an equivalent of Western systematic, evidence-based, and quantitative science on Java. Van Klinken is aware that he touches on various heated debates within the history and philosophy of science by posing this question. Perusing extensive descriptions of collections of Javanese manuscripts, he concludes that some elements contained in larger narratives could qualify as descriptions based on actual observation and were therefore more or less scientific. There does not appear to have been great interest in astronomy and quantification on Java. Van Klinken concludes that an institutional context for scientific research did not exist there, as court intellectuals were pursuing more literary and cosmological pursuits in providing justifications for the power of the courts. Van Klinken also highlights the importance of science for a young generation of Indonesians after the turn of the twentieth century. This generation displayed an eager interest in science and coupled it with emancipatory and anticolonial impulses.

Three essays detail Dutch scientific activity outside the Dutch East Indies. Peter Rietbergen explores the activities of scientists and physicians on Deshima, the small trading island outside Nagasaki occupied by the Dutch, who had exclusive trading rights with the Japanese, since the seventeenth century. For a long time, the only knowledge in Europe of Japan had been acquired by the traders on this island. Siegfried Huigen explores the ethnographic fieldwork conducted in the Dutch Cape colony in today's South Africa. Finally, Gert Oostindie investigates the limited amount of Dutch scholarship conducted in the Dutch West Indies.

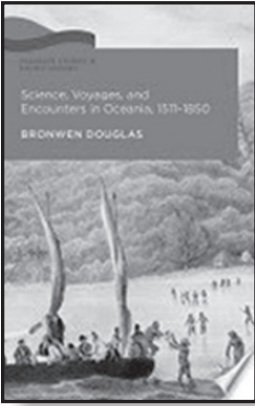
The lack of Dutch scientific activity is particularly interesting when viewed in the context of what took place in rival empires. To provide this context, chapters on the British and the Spanish empire are included. David Arnold relates the activities of British physicians in India who, in their spare time, were engaged in collecting specimens and observations on the weather, climate, geology, and a great number of other topics. In the British Empire, science had to be practical, and those individuals who occupied themselves with it generally conducted surveys of areas, constructed medical topographies, and refined maps. Raquel Reyes explores the Malaspina

expedition to the Philippines organized by the Spanish throne. Unfortunately, the results were not published for a very long time, for reasons that are not entirely clear. This might have been the fate of many other expeditions and voyages of exploration. There was an intense rivalry between empires, and making scientific results available freely could undermine one's competitive advantage in the East.

During the last two decades, colonial science, and global networks of mediation and scientific exchange have received considerable scholarly attention. Scientific activities conducted in the colonies are no longer considered derivative of cosmopolitan developments. Naturally, initial attention has focused on path-breaking influential developments. The strength of this volume is its exploration of scientific activities in colonial areas during a time that is not known for its scientific accomplishments. As a consequence, the reader gains a much greater understanding of scientific activity during common, average, and everyday colonial conditions. The volume highlights that scientific activity in the Dutch East Indies was highly international in character: the scientists and physicians working there came from all over Europe and North America. It would be interesting to see if science in other empires had such an international character as well. The essays in this volume also raise important questions about the extent knowledge acquired in the Indies traveled beyond the archipelago. Many individuals doing science in the Indies complained that there was hardly any interest in their work in the Netherlands, let alone in other Western countries. Knowledge could be universal, but if scientific reports were not read outside Batavia, this universality is more or less meaningless.

Hans Pols
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Bronwen Douglas, *Science, Voyages and Encounters in Oceania, 1511-1850*, Basingstoke: Palgrave Macmillan, 2014, pp. xx + 361. Figures. Maps. Bibliography. Index. ISBN 978-1-137-35425-9.

Drawing on a very wide body of research this book seeks to accomplish two very significant goals. The first of these is to delineate the way in which European contact with the Pacific helped to shape changing conceptions of the way in which human difference could be classified – a quest which ultimately culminated in the all too potent idea of race. The second major goal of the book aspires to act as a counterweight to this Eurocentric

formulation of Pacific encounters with a strong emphasis on indigenous Pacific agency which, it is argued, made its mark on European accounts of encounters. Such indigenous impacts on European ways of writing and thinking about the Pacific can, the author contends, be retrieved through close and attentive readings of the records of European Pacific exploration to locate such ‘countersigns’.

In tracing the development of ideas of race and human difference the author is developing further the schematic outline provided by her very valuable contributions to her co-edited volume, *Foreign Bodies, Oceania and the Science of Race* (ANU, 2008). The overall thesis which is further developed here with much close documentation is that, until around the end of the eighteenth century, the idea of race was literally only skin deep: that the physical differences between peoples were largely explained by external factors such as the impact of climate. Theorizing about conceptions of innate racial difference arose with the formulations outlined by Kant which were given canonical standing by Blumenbach. With careful scholarship the book shows, however, that Blumenbach took some time to move to such biological conceptions of race and the earlier editions of his influential writings did not neatly conform to this new Kantian paradigm. More generally, the author shows the much greater fluidity of what was understood by race before Kant by subjecting the key accounts of European encounters with the Pacific to close and almost forensic linguistic examination. Douglas shows, for example, how the standard English translation of Bougainville’s journal distorts the meaning of the original French by importing retrospectively later formulations of racial theorizing. Though the strongly theoretical tone of this work makes more demands on the reader than the author’s previous writings on the subject this monograph provides detailed documentation on which to base informed discussion on an all too significant theme: the development of ideas of race and, in particular, biological understandings of race.

Using the lens of the European encounter with the Pacific the work, then, delineates a clear trajectory as the idea of race moved to take on an increasingly biological character with all the potency for harm which was to derive from this. By contrast, the other major strand of the book – the study of the indigenous response to the arrival of the Europeans – is, quite intentionally, more pointillist with an emphasis on the particular rather than the general. Indeed, in the historiographical survey in the introduction, the author is at pains to distance her work from those who contrast Europe with a generalized Pacific. Though the approach taken is influenced by historian-anthropologists such as Salmond, Denig or Sahlins it does not seek to reconstruct the structures and beliefs of indigenous Pacific societies. Rather the emphasis is on the way in which the diverse peoples of the Pacific exercised agency when encountering the European strangers. The actions of the Pacific peoples themselves, it is argued, can be discerned in the records, both written and visual, accumulated by the European explorers. Such records were, in turn, taken back to the metropolitan ‘centers of calculation’ (to use Bruno Latour’s pregnant phrase) where the lived experience of Pacific encounters was transformed into scientific categorization. Such categorization was, in turn, to shape future encounters and colored the way Europeans looked on others providing justifications for imperial expansion – particularly once biological ideas of race took root.

Though such intellectual archaeology in tracing the ‘countersigns’ indicating Pacific presence in European encounters does underline the need to take account of both sides of the beach the results of such investigations rarely change fundamentally the received views of such encounters. An attentive reader is likely to infer interaction in many accounts and, given the evidence available, it is difficult to go much beyond this. Where this work does, however, take things further is in its comparison between the original journals with the published accounts. Such comparisons are particularly telling in the analysis of the journals of the circumnavigation of Australia by the Flinders and Baudin expeditions and their tendency to brush over the role of indigenous actors in their published accounts. Even so, the accounts of particular interactions across the wide expanse of the Pacific do not lend themselves readily to an overall perspective. The documentation provided by the book reinforces the need to take account of indigenous agency but it does not provide an integrated framework through which to view either Pacific or European societies in new ways.

What the book does provide, however, is a view of Pacific encounter based on an exceptionally broad chronological span. Few books cover the history of Pacific encounter from the early voyages of the Portuguese to the mid nineteenth century in a single volume (though the date of Cook’s death on p. 49 needs amending from 1778 to 1779). A particularly important aspect of the book is its attention to the French voyages of the period of the Restoration and the July Monarchy which are only scantily represented in the existing literature. In this field, particularly, the

book unearths much that is unfamiliar and will lead others to new sources as well as possible ways of viewing the Pacific. Though framed by dates drawn from European history the work confirms the need to take account of both sides of a Pacific frontier which is being examined with ever closer scrutiny by a growing number of scholars. In doing so, this work plays a significant role in the larger movement to draw the Pacific into its rightful place in the web of world history.

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SUBSCRIPTION and STAFF INFORMATION

The Bulletin of the Pacific Circle is the communication medium of the Pacific Circle, organized in 1985 to promote and assist scholarship in the history and social studies of Pacific science. The Circle is a commission of the International Union of the History and Philosophy of Science.

The Bulletin is distributed twice a year with the assistance of the Department of History, University of Hawai'i, Manoa.

Membership in the Circle, which includes *The Bulletin*, is available at a cost of US\$25 per year for individuals and US\$35 for institutions. Additional contributions in any amount to support the costs of production and distribution will be gratefully accepted.

Checks or money orders can be made payable to "University of Hawai'i Foundation" (please note "Pacific Circle" on the memo line) and sent to the Editor:

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