

**Edward C. Carter, III, ed..** *Surveying the Record: North American Scientific Exploration to 1930*. Memoirs of the American Philosophical Society. Philadelphia: American Philosophical Society, 1999. xv + 344 pp. \$30.00, cloth, ISBN 978-0-87169-231-3.



**Reviewed by** Gary Kroll

**Published on** H-Environment (August, 2001)

## History of American Exploration

The adventure of exploration has recently captured the hearts and minds of both academicians and the wider reading public. Trade presses have turned out a spate of journalistic and historical treatments that cover such wide ranging subjects as the 1996 Everest disaster, the discovery of the Titanic, Arctic and Antarctic expeditions, and Lewis and Clark's "Corps of Discovery." The taste for exploration has also been the subject of (less well known) academic treatises, here riding the recent trend of the history of geography. So we now have sophisticated analyses of trigonometric surveys, the science of empire building, and natural history exchange networks. It would be difficult to explain the happy coincidence of academic and popular attention to exploration, but what is clear is that American writers and readers seem to be constructing a framework for making sense of historical and contemporary exploration.

It was with this intent in mind that a group of historians, art historians, geographers, anthropologists, archaeologists and biologists met for a three-day conference in 1997 at the Library of the

American Philosophical Society with the program goal to "illuminate new historical approaches to [American] scientific expeditions and surveys" (xi). Of the twenty-six papers delivered, sixteen have been reproduced in the recently published APS Memoir, *Surveying the Record*. Accordingly, *Surveying the Record* reads like a refurbished conference proceedings volume. Read as a book, the reader will be hard pressed to synthesize a unifying vision of what American exploration has been all about; and most readers will find that the conference had only limited success in unearthing any "new historical approaches." The value of the text lies not as a whole, but rather in the individual papers/articles that tackle the subject of exploration from a broad range of disciplines: environmental history, institutional history, western history, history of science, and art history. As such, *Surveying the Record* has re-articulated American exploration as a thoroughly multi-disciplinary affair. This seemingly trite point actually directs us to an innovative historical approach, namely, the best way to get at the heart of exploration is by si-

multaneously looking through a variety of disciplinary lenses.

The book retains the thematic continuity of the 1997 conference and begins with three essays discussing, sometimes obliquely, the history of cartography. John Allen starts off with an essay that functions as a quasi-introduction to the entire volume by discussing the three doyens of exploration studies John Kirtland Wright, Bernard DeVoto, and William Goetzmann and the historical methods that each employed. Unfortunately, Allen lets slide the opportunity to establish points of continuity and difference between this pioneering historiography and conference participants. John Rennie Short then analyzes three early-federal cartographers William Guthrie, Jedidiah Morse, and John Melish to show how the art and science of mapmaking was largely about envisioning the youthful nation through an ideology of exceptionalism, national expansion, and continental dominance. Clifford Nelson closes out the section with a survey of nineteenth century geology maps.

The second section on oceanic exploration begins with Elizabeth Green Musselman's historical and sociological analysis of the conflicts between naval officers and civilian scientists on Charles Wilkes' U.S. Exploring Expedition. In contrast to the previous three essays, Musselman spends most of her time discussing scientists doing the work of exploration, and this emphasis on scientific practice is continued by Barry Alan Joyce's narrative of Elisha Kent Kane's 1850s Arctic expeditions that owed their limited success to Eskimo generosity instead of strict adherence to civil code. Dean Allard then follows Spencer Baird and his Fish and Fisheries Commission steamer, *Albatross*, along the eastern seaboard in search of productive resources.

A section on exploratory art begins with Katherine E. Manthorne's splendid treatment of the relationship between word and illustration in the work of Frederic Church. She posits that since

the verbal was the dominant scientific discourse, Church drew from verbal authority (through journals, letters, narrative accounts, and expository pamphlets) to bolster the representational legitimacy of his landscape paintings. Next, Ron Tyler discusses the mechanics of government publication illustrations related to the western exploratory surveys of the 1840s through the 1860s. Tyler makes the intriguing though difficult to support claim that these illustrations "began to create a constituency for expansion into and development of the West" (p. 169). Those of us trying to understand the persuasive force of Manifest Destiny have good reason to elaborate on Tyler's cue. Debora Rindge rounds off the section with an analysis of popular magazine woodcuts that chronicled the "Great Surveys" between 1867 and 1879. Since government expeditions in the West were essentially public ventures requiring federal funding, these illustrations functioned to garner public support.

Don Fowler and David Wilcox open up the section on anthropology and exploration by demonstrating how the development of American anthropology and archaeology depended on exploration in the West, and especially the southwest. Methodological and theoretical issues in anthropology were articulated and refined on expeditions designed for both practical use (such as the U.S. Army Topographical Engineers) and scientific knowledge (the Hemenway Southwestern Archaeological Expedition, for instance). In a more tightly focused paper, Douglas Cole and Alex Long show how a particular practice of exploration, namely Franz Boas' anthropological field surveys, "functioned as a means of coordinating the research of ... students and collaborators toward a common goal" (p. 227). Boasian field surveys thus codified an anthropological tradition based on an anti-evolutionary historical method that held persuasive force throughout the early-twentieth century.

A requisite section on Lewis and Clark includes Gunther Barth's fascinating comparison of Meriwether Lewis as a representative of "Army culture," and Alexander Mackenzie of "fur trader culture." The very important point, also made in Donald Worster's contribution, is that an explorer's social context influences the nature, function, and character of the expedition. Albert Furtwangler also makes a passionate appeal for us to remember Lewis and Clark as members on a scientific expedition, instead of as heroes venturing into a pristine wilderness to "get away from it all."

Finally, "New Thoughts on the West" contains Matthew Godfrey's narrative of the overlooked ornithologist Robert Ridgway who, at the tender age of sixteen, accompanied Clarence King on the survey of the fortieth parallel. Godfrey brings us on this western tour to better understand the training of a naturalist in mid-nineteenth century America. Brad Hume analyzes the sporadic writings of a spate of western explorers to demonstrate that a Romantic aesthetic (read art) and Humboldtian quantification (read science) were not irreconcilably separate entities, but rather were "a dialectical presentation of the process of globalizing the earth which ... unified by equating the grand, nationalist enterprise with the dynamic forces of nature" (p. 310). And with characteristic grace, Donald Worster gives a brief and elegant glimpse into his recently published tome on John Wesley Powell by discussing the seldom-ballyhooed Second Colorado River Expedition.

When considered as a whole, one is left with the overwhelming impression that exploration has served as an instrument of American empire building. With the exception of Short's and Worster's articles, there is little overt discussion of this important topic, but there is evidence in the nooks and crannies of almost every article: Lewis and Clark as military surveyors, the Pacific Railway Surveys, the U.S. and Mexican Boundary Survey, Clarence King exploring the Comstock lode, and the U.S. Fish and Fisheries steamer *Albatross*

plying Caribbean waters. Even "purely" scientific expeditions were conspirators in the construction of what Thomas Richards has called the "imperial archive," a way of surveying and accumulating knowledge of a sprawling empire.[1] In order to understand the natural history of exploration, we must begin to examine the myriad imperial contexts that sustain it. This is doubly significant in that America has often fancied itself a non-imperial nation, and this may present interesting contrasts to the work of exploration in more easily recognizable nineteenth-century empires. And the project that I am proposing, as *Surveying the Record* makes abundantly clear, is a multi-disciplinary affair. Indeed, it will require the labors of various disciplines to show how, as Worster states in his concluding remarks, "the explorer carried those social goals, whether idiosyncratic or common, into the country with him and mixed them among his collections, sketches, notebooks, and other natural data" (p. 327).

Ironically, a history of exploration and empire is not a new project; most of William Goetzmann's writings fall precisely into this category. But a more contemporary study of exploration and empire might look very different from Goetzmann's groundbreaking *Exploration and Empire* (1966). For one, a contemporary study would need to reconcile the work of western explorers with new western historiography. So instead of showing the work of explorers in "Winning the West," it might show how explorers participated in a "Legacy of Conquest." Secondly, a new exploration and empire may look to recent environmental histories that show how imperial knowledge of distant environments, and the manner of managing those environments, did not emerge from a solely western-scientific perspective. Rather, knowledge emerged from a process of negotiation between the imperial explorer and the resident indigenous population. This point is made by Worster and Joyce above. Finally, a new exploration and empire will need to address the twentieth century. America's imperial program did not end where

the North American continent meets the Pacific Ocean. Exploration and expansion continued into modern times, and there are important similarities and differences when compared to the nineteenth century tradition of exploration.

Notes

[1]. Thomas Richards, *The Imperial Archive: Knowledge and the Fantasy of Empire* (New York: Verso, 1993).

If there is additional discussion of this review, you may access it through the network, at <https://networks.h-net.org/h-environment>

**Citation:** Gary Kroll. Review of Carter, Edward C., III, ed. *Surveying the Record: North American Scientific Exploration to 1930*. H-Environment, H-Net Reviews. August, 2001.

**URL:** <https://www.h-net.org/reviews/showrev.php?id=5372>



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 United States License.