

better than Nainoa. Low dedicates a unique attention to understanding and articulating Nainoa's personal journey, and in doing so humanizes and demystifies a great local legend. Readers of *Hawaiki Rising* will have the privilege of learning this story, of seeing Nainoa grow from an uncertain young man who had internalized society's expectations of him to an accomplished navigator with such faith in his na'au (gut) he could see his destination in his mind's eye from hundreds of miles away. For locals familiar with Hōkūle'a who had always wondered how Nainoa had accomplished what no Hawaiian had for the better half of a millennia or, perhaps, for aspiring young kia'i (caretakers) of the culture feeling similarly called to take up their own kuleana and who are unsure of where to begin, *Hawaiki Rising* holds the answer. Though a connection to Hawaiian culture, history, or land is by no means a prerequisite for picking up this book, it would undoubtedly enrich anyone's reading experience. Nevertheless, any reader would benefit from *Hawaiki Rising*'s inspirational lesson in what

Maps for Time Travelers: How Archaeologists Use Technology to Bring Us Closer to the Past by Mark D. McCoy, University of California Press, Berkeley, CA. 280 pages

Reviewed by Kapa Lyman
Department of Anthropology, University of Hawai'i
at Mānoa

It's been said that new methodologies in archaeology are like giving a child a hammer: they proceed to hammer everything in sight with it (Moore and Keene 1983). It takes practice and experience to figure out what to hammer, and to what purpose. Drennan (2001) argued that this process is true for Geographic Information Systems (GIS) in archaeology. He states that most GIS literature in archaeology is about the tedious details of methodology, procedures, and data management. Is this still true today or have archaeologists finally successfully integrated GIS and geospatial technologies into the profession?

Maps for Time Travelers: How Archaeologists Use Technology to Bring Us Closer to the Past, a new book by Mark D. McCoy, is a wide-ranging overview and introduction to geospatial technologies in archaeology, and an attempt to turn the hammer into a precision instrument. Geospatial archaeology can be

remarkable feats one can accomplish when they let go of shame and trust in themselves, their preparation, and the steadfast teachings of their mentors.

In the afterword, a reflection in Nainoa's own voice, he recalls one of Hōkūle'a's most remarkable feats yet: her three-year, circumnavigational journey to mālama honua (care for the planet). It is customary, he says, on a journey as monumental as this to bring back "something of value" as an offering to your people, and tells us that on the day of her arrival at Magic Island, Hōkūle'a carried onboard "lessons of hope and action collected from around the world." For though her homecoming may have marked the end of one great voyage for Hōkūle'a, *Hawaiki Rising* makes clear that this historic occasion was but one of many stops on an even greater and ongoing journey for the Lāhui – a journey to (re)build a more Hawaiian world and a sustainable future that takes Hawaiians and their allies to the Mauna, to the lo'i kalo and loko i'a, to a stage, the courts, a classroom, or even all the way out to sea.

defined as the application of geospatial technologies, such as GIS, remote sensing, and laser scanning to study how people in the past inhabited and shaped the world around them.

McCoy received his PhD from University of California Berkeley in 2006 and has taught at both the University of Hawai'i at Mānoa and the University of Otago in New Zealand. He is currently an associate professor at Southern Methodist University, Texas. He describes himself as a landscape archaeologist with an interest in geospatial archaeology, the development of ancient political economies, and human ecodynamics, with a regional focus on Pacific Islands such as Hawai'i and New Zealand.

McCoy presents the study of archaeology as the careful discovery and collection of scientific knowledge, such as the various geospatial technologies outlined in this book. These technologies are part of a larger geospatial revolution which has created a flood of new archaeological information. McCoy argues that this information can create a better, more complete, and a more accessible rendering of the past, but it is still up to archaeologists to make sense of this massive amount of data in order to form a clear picture and to understand it.

The body of the book is an overview of contemporary geospatial technologies and their application in

various projects around the world; light detection and ranging (LIDAR) in the Yucatan, crowd-sourced site finding in Asia, crop marks in World War I Belgium battlefields, farming and climate in New Mexico. These and other case studies present an introductory synopsis of how geospatial technologies can be used to study the remnants of past societies.

One fascinating example included is the modeling of the road network of the ancient Roman Empire in a GIS system. The total length of the Roman road network was greater than the distance between the earth and the moon. The “ORBIS: Stanford Geospatial Network Model of the Roman World” system is a computer model that functions like a travel planner for estimating duration, distance, and cost (in *denarii*) between various Roman settlements whether by land, sea, or river.

A problem with the book is that it suffers from a dearth of good figures. More maps, photographs, and diagrams could have helped to better explain some of the very complicated technologies discussed. Obviously these topics are primarily visual in nature. A companion website would have been very helpful, especially for students of archaeology or geospatial technologies, and could have provided other information such as links to the project sites directly, example datasets, guides to relevant computer applications, or browse-able web maps. For example, computer programming manuals typically include shortcut hyperlinks that connect directly to code samples and errata on the author’s personal website which are especially helpful in the digital version of the document.

In a book about ‘Maps for Time Travelers,’ there is also very little discussion of how the vast amount of data created by the various geospatial technologies is integrated and made accessible for archaeological consumption. This is of course done by being mapped in a GIS system and its absence from the book is

conspicuous (unless this forms the sequel). McCoy references Wheatley and Gillings 2002 for those seeking further information about GIS in archaeology; this book is long overdue for replacement as the definitive archaeological GIS reference. The failure to include an informative discussion of the current state of GIS applications in archaeology here is a lost opportunity.

This book presents a good mix of interesting case studies and descriptions of their application while being informative and enjoyable to read. I would recommend this book as course material for an archaeological undergraduate course and for any professional archaeologists who are curious about geospatial archaeology. This book will certainly provide a springboard for further enquiries into how geospatial archaeology can be used in the field and also as a reference for designing research questions that take advantage of these technologies.

Even if it’s true that archaeologists attempt new methodologies like a child indiscriminately beating a hammer, in the case of geospatial archaeology that early fascination has paid off. McCoy’s book is proof that geospatial archaeology has been successfully integrated into the archaeological profession. Of course, it’s also fun to keep banging the hammer!

References

- Moore, J.A., and A.S. Keene, 1983. Archaeology and the Law of the Hammer. In *Archaeological Hammers and Theories*, edited by J.A. Moore and A.S. Keene, pp. 3–13. Academic Press, .
- Drennan, R.D., D.R. Brothwell, and A.M. Pollard, 2001. Overview - Numbers, models, maps. Computers and archaeology. In *Handbook of Archaeological Sciences*, pp. 663–670.
- Wheatley, David and Mark Gillings, 2002. *Spatial Technology and Archaeology: The Archaeological Applications of GIS*. CRC Press.