Book Review

Brent Whitford

McCoy, M.D. 2020. Maps for Time Travelers: How Archaeologists Use Technology to Bring Us Closer to the Past. University of California Press, Berkeley, United States.

Maps for Time Travelers: How Archaeologists Use Technology to Bring us Closer to the Past, by M.D. McCoy, is dedicated to the topic of geospatial technologies in archaeology. Other volumes that immediately come to mind, which explore the same or an arguably similar topic, include *Spatial Analysis in Archaeology* by Hodder and Orton, *Beyond the Map: Archaeology and Spatial Technologies* by Lock, *Spatial Technology and Archaeology* by Wheatley and Gillings, *Landscape Archaeology and GIS* by Chapman, and *Geographical Information Systems in Archaeology* by Conolly and Lake. In fact, a brief library search at my institution returned over one hundred and fifty results when filtering for books using the search line "archaeology and geospatial technologies", hence, there is certainly no shortage of books on the topic at hand, which begs the question: what distinguishes *Maps for Time Travelers* from other such volumes? Thankfully, McCoy answers this question very early on in his text. Rather than write a textbook-like introduction on the use of geospatial technologies in archaeology, one that is designed for students of archaeology and/or for active practitioners alike, McCoy composed a book on the use of geospatial technologies in archaeology that is explicitly designed for the interested layperson.

"And so, if you have never read a book about archaeology, but you love time travel and want to see where this is going, buckle up". As the title states, this book is about maps for time travelers. In fact, throughout most of the text McCoy relies heavily on the analogy of the archaeologist as time traveler. He does so in order to pique the interest of his audience by appealing to their (presumably) shared curiosity about the past and to suggest that they, as well, can travel through time. Rather than rely on the more commonly perceived notion of the archaeologist as treasure hunter, as does the popular media by espousing characters such as Lara Croft and Indiana Jones, McCoy suggests to his audience that archaeologists are better characterized as time travelers. Archaeologists, as persons who "are intensely curious about history" are not simply interested in "finding things" but rather are interested in "finding things out". "We are interested in artifacts not for their own sake, but because they can help us understand the societies that produced them". The time traveler analogy is quite effective, not only because it more accurately portrays the core aims and intent of modern-day archaeology—as compared with the treasure hunter trope—but also because it highlights the use of futuristic technologies in archaeology not so different from time machines. Remote sensing and geographic information systems, argues McCoy, are the archaeologist's time machines. Having thus established his time traveler analogy and set up the narrative hook, McCoy then goes on to discuss how geospatial technologies have helped archaeologists access the past and to answer important questions about the past as well.

In terms of its structure, *Maps for Time Travelers* is divided into three distinct parts. Part I serves as an introduction to the history of archaeology and on the development of archaeological theory. McCoy does an excellent job at delivering a crash course on the latter, skillfully moving from antiquarianism all the way to post-processualism in a single chapter without ever forcing the reader to grapple with disciplinary specific terms. He furthermore introduces his audience to the critical concept of multi-vocality and to the importance of viewing the past from multiple different perspectives. He argues that, like a time traveler, archaeologists experience

the past from their own unique present-day perspective and that by producing multiple stories about the past we can ultimately better understand its complexity. He then goes on to elaborate on the important effects of technological developments as they are used to help shape our perspectives on the past.

Part II, in turn, deals entirely with the history and development of the various geospatial technologies commonly utilized in archaeology—such as passive remote sensing, active remote sensing, and geographic information systems. These broader categories include aerial photography, satellite imagery, LIDAR, photogrammetry, ground penetrating radar, digital mapping, modeling, augmented reality, and the creation of virtual worlds, among others. Part II is then filled with numerous archaeological examples, taken from several different regions and time periods that were obtained by using diverse methods to illustrate the variability of the available geospatial approaches in archaeology. In this section, however, McCoy seems to have set aside the task of furthering his time traveler analogy in favor of focusing on the detailed description of the history and development of geospatial technologies themselves, sometimes even venturing into such painstaking detail that I doubt would be appealing to the general layperson.

To borrow McCoy's time traveler analogy, reading Part II felt more like reading through the detailed blueprints of a time machine in which no single part of the machine was overlooked, no matter how inconsequential. In truth, I felt more like a time machine engineer than a prospective time traveler when reading this section of the book. The highly descriptive nature of Part II, it could be argued, additionally relies too heavily on presenting geospatial data alongside minimal interpretation, and thus focuses too much on "finding things" as opposed to "finding things out". Though McCoy does return to the importance of "finding things out" in the next section of his text, by that point the lay-reader will most likely have forgotten the important distinction between the two aspects of archaeology. It may then have been better to approach them in conjunction all along. That said, I believe that the overly detailed and technical character of Part II as a whole is merely an unfortunate misstep in what is otherwise an interesting and thorough review on the history and development of geospatial technologies.

In Part III, McCoy returns to the aims and intent of modern-day archaeology in a more direct sense. Here, McCoy is focused on showcasing how the various geospatial technologies described in Part II can be used to answer important questions about the past. In other words, now that the reader understands how the time machine was built, it is time to take it for a test drive. In particular, McCoy discusses the ways geospatial technologies have been used to address important questions regarding migration and mobility, subsistence practices, and social organization in the past. The first chapter of Part III interestingly features a section on the use of geospatial technologies in paleoanthropological research, discussing their application to the evolution of habitual bipedalism by using scans of prehistoric footprints. McCoy therefore keeps to an important point that he made much earlier in the text: time travelers should not be restricted only to the exploration of historical periods. Though the section on paleoanthropology is a welcome departure from the more commonly utilized examples of landscape analyses, feature detection, and/or settlement pattern analyses, it unfortunately stands alone as a major alternate example within the wider text.

In that regard, though geospatial technologies are often utilized to compliment and or further the aims of archaeological excavation, a search of the book reveals that the term *excavation* is used only seven times, *excavate/excavated* two times, *digging* five times, and the term *dig* only 3 times. This is especially puzzling considering that the

cover image intentionally highlights the paleoanthropological research previously discussed and focuses the reader on how geospatial technologies can be applied to the study of such small and obscure things as Lower Paleolithic footprints. No doubt, these footprints were also uncovered during the process of archaeological excavation. Why then should other such examples of geospatial technologies applied directly to excavation be omitted? Normally, I would not lament the exclusion of excavation practice in a book that is devoted entirely to introducing the reader to the use of geospatial technologies in archaeology, which for the most part are admittedly most commonly applied to site- or landscape-scale studies. However, considering that the intended audience is composed of laypersons who were not expected to have ever read a book about archaeology, I would suggest that the omission of excavation practice risks misconstruing how archaeologists ultimately come to "find things out". After all, there would hardly be any means of interpreting the numerous examples of geospatial evidence presented throughout the text were it not for the practice of archaeological excavation and its derived knowledge.

In conclusion, I wish to make a disclosure: I am an archaeologist. I am also an archaeologist who so happens to be actively engaged with the use of geospatial technologies in archaeology. It should then perhaps be noted that when I first set out to review *Maps for Time Travelers* by McCoy, I was not anticipating to be excluded from its target audience. My stance vis-à-vis the topic then placed me somewhat at odds with the task of reviewing the book's intent; that is, to communicate the importance of geospatial technologies in archaeology to the interested layperson. Though I must say that I especially enjoyed McCoy's use of the time traveler analogy, and I suspect that the layperson will likely find it appealing as well, I cannot say for sure that the general public will find it easier to approach the subject of geospatial archaeology as a result. I therefore cannot really comment on whether the book is likely to reach its target audience in any meaningful way. Furthermore, given the high level of description included in Part II of the text, I would rather recommend this book to those who are already engaged with the use of geospatial technologies in disciplines other than archaeology, such that they might discover new applications directly related to their skillset in a field that they may not yet be familiar with. Likewise, I would recommend this book to archaeologists who do not regularly engage with the use of geospatial technologies and who wish to learn about alternate means of answering very important questions about the past.

In either case, whether I consider myself qualified or unqualified for the purposes of this review, I can honestly say that *Maps for Time Travelers* made for a unique and generally enjoyable reading experience. I found myself setting aside, for the moment, my experiences as an archaeologist in favor of approaching the book as a prospective time traveler. Ultimately, the time traveler analogy is really what allowed me to approach this book—devoted to a topic that I have read about countless times before—from an entirely different perspective. In other words, McCoy helped me to travel back in time to the days in which I was also a layperson merely interested in the topic of geospatial archaeology. That I am even more interested in the topic after having read this book is a testament to the effectiveness of the author's approach. Therefore, even if you have read a book about archaeology or two, if you are interested in time travel stories you might consider picking up a copy of *Maps for Time Travelers*.

Brent Whitford
brentwhi@buffalo.edu
Anthropology Department
University at Buffalo