

THE HISTORY OF CARTOGRAPHY, VOLUME SIX; CARTOGRAPHY IN THE TWENTIETH CENTURY by Mark Monmonier (ed.), University of Chicago Press, Chicago, 2015, 1960 pp., ISBN 9780226534695, \$500.00 (approximately £346.00) (hardback)

The publication of volume six of *The History of Cartography* is a momentous occasion. Monmonier, its editor, has the right blend of general and specialist knowledge to make this a very special volume. His 17 entries here are proof that if cartography in the twentieth century can be said to have a history, he is the man to make the case for it. The fact that the format has now shifted from previous volumes' articles to what, here, can only be described as encyclopaedia-style entries is some indication of the troubles newer cartographies have given present editor. Going into this review I thought: 'here we experience the hodge-podge and the waning of a discipline at the same time as we see its re-invigoration in GIS and similar new technologies that make the idea of cartography seem quaint' (or thoughts to that effect).

A glance through volume six will prove that it is anything but quaint and that, in fact, cartographic endeavour only continued to grow in complexity, depth and breadth of application throughout the twentieth century. The evidence for this is the volume itself; a rigorous wrestling down of the state of the art into prone form, in two cinder-block parts that sat on my desk in various states of openness and juxtaposition as I attempted to grapple with reviewing such a monster. Having access to PDFs only made it too easy, and I quickly tracked down physical copies in the Bodleian and London libraries, thinking that change of scene, or printing the index and table of contents would somehow make the job easier. The only thing that did so was actually sitting down and reading the book whether in hard copy or on-screen.

The richness, depth and variety of coverage is staggering and, as with the other volumes of *The History of Cartography*, the achievement is difficult to fathom. In fact, I would argue that volume six goes beyond even the previous volumes in magnitude of its achievement not only in size but in quality. The fact that volume six consists of encyclopaedia-style entries does not diminish but, on the contrary, only heightens its impact. I also predict that, of the complete set of volumes, this could end up being the one that gets the most use in terms of both citation and public engagement. Both of these predictions (purely speculative on my part) bode well for cartography for we see here, finally, what cartography is, and its continuing relevance in evolving technological and mediated milieus of the twenty-first century.

Volume six contains some exceptional tools for thinking through cartographic research, especially categorization and process. Each inside cover contains an entry by conceptual cluster with cross-referenced sub-entries that appear in more than one cluster. This 'map' of the volume is a way of seeing the information contained in a way that both the

index and table of contents cannot convey. It is not clear whether this conceptual cluster 'map' would be included in potential electronic versions of this volume, but it is certainly a very useful way of grappling with the extent, coverage, and concepts in one glance. 'Representational Context', from that glance, is demonstrated to be by far the recipient of the largest amount of coverage, followed by 'Individuals, Institutions, Artifacts and Events' and 'Methodological Context'.

The second 'tool' is an essay by Mark Monmonier entitled 'Brief Processual History of Volume Six' (p. 1787). Here, Monmonier tells us the story of how the volume 'went down' over the years, its trials, tribulations, and anomalies in the timing of the various volumes. Volume six is, after all, appearing before volume four in part because of the ultimate success in the vast undertaking of conceptualizing, pitching and assembling its material. Needless to say coordinating the hundreds of authors under one banner and bringing the material enough homogeneity of style and overlap of interest appears to be an undertaking at least as daunting as sending a man to the moon. We come to know through this essay that some of the beginnings of volume six took place in 1997 at a conference in Washington DC, making this an effort with a minimum 20-year time span.

The volume as a whole could be accused of being centred too much on North American cartography, but this would be unfair, especially given the breadth and depth of coverage of individuals and concepts whose origins lie outside North America. Coverage of topographic and military mapping (to name just two conceptual clusters) is exceptional and does justice to the geographical spread and variety of approaches across boundaries and globally. Boundary mapping is given similar treatment, but here is broken down by continent. Therefore, one cannot even begin to level the partiality charge, despite the *History of Cartography's* legacy as a product of The University of Chicago Press.

From my perspective, volume six is a treasure trove, and my own favourite entries were those on Counter-mapping (with a beautiful reproduction of a map by Jay Johnson); GIS (including a very useful sub-entry on metadata); Geographic Names; Colonial and Imperial Cartography; and Road Mapping. However, it is so packed with information that only a full read-through does it justice. Every page contains a richness of information, insight and critical depth that many monographs can only aspire to. That critical aspect is continually at the forefront of the reading, in the sense of scholarly rigour and peer-review, but also in the sense that social implications of geospatial technologies like cartographic processes and products do real work in the world at multiple temporal and spatial scales and levels.

The *History of Cartography Volume Six* repays reading in spades and I urge all interested readers to get started as soon as possible. The rewards are too rich to put off for another day.

GWILYM EADES

Royal Holloway University of London, UK

Copyright of Cartographic Journal is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.