value-free representations or pictures. By producing cartographic propositions, mapmakers are responsible for their maps. The mapmaker's versions of space and place can also be contested by other mapmakers with different propositions.

The book editors round up their (re)thoughts on maps in a final chapter they call a "manifesto for map studies."They suggest a research framework based on three M-words: modes, methods, and moments of mapping. "Modes" address "alternative ways to think through cartographic history and contemporary practice" (p. 220), and include maps on a screen, the insertion of cartography in visual culture in general, as well as authorship and (institutional) infrastructures of mapmaking. "Methods" correspond to the necessity of developing research strategies to study mapping practices and contexts, such as the differences between virtual and material maps, the political economy of the map production processes, and the emotional and ethnographic aspects of mapping. "Moments" entail events, incidents, and accidents that contribute to the understanding of mapping practices, and which need to be examined in detail. These (hi)stories can be "moments" of failure (for example, when something goes wrong during the mapping process), change, memory, or creativity.

The twelve essays in *Rethinking Maps* show that the study of maps can go far beyond what are sometimes thought of as the boundaries of the discipline of cartography. Literary scholars, social scientists, political ecologists, and many other groups are all intensely interested in maps, and can definitely enrich the theoretical and practical debates on cartography with their insightful approaches to the representation of space and place. One or another mapmaker might complain that philosophy is irrelevant for cartography and that cartographic practitioners do not need this knowledge since they produce maps according to what their clients demand. However, this could be a misreading of the present situation. Similar to the video rental market, cartographers should read the sign (or the map) of the times. Just to remember, Blockbuster Inc. had to file for bankruptcy because they ignored the innovative concepts of online videos, DVD by mail and rental kiosks in supermarkets offered by their competitors Netflix and Redbox. New concepts may open up new markets, even for cartographers. In this sense, it would have been interesting to have included a chapter on "cartography in practice" in the book. An essay written by a professional from the area could give insights into the world of commercial cartography and the problems and solutions that exist.

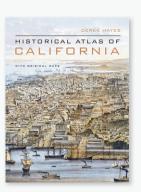
The reader of *Rethinking Maps* may also complain about the structure of the volume. There is no clear logical order in the sequence of the chapters. One idea might have been to organize the essays according to the three

M's (modes, methods, and moments) proposed by the editors in the final chapter. This way, the reader would be able to find a thread in the writing and establish links between the contributions. A wide range of different approaches in cartography should lead to dialogue and not to fragmentation.

As an invitation to rethink maps, the book could have included more figures, maps, and other visual examples to help illustrate these new directions in cartographic thought. What do these cartographies look like? How can we represent them? The exorbitant price of the volume (\$150 in hardcover, but only \$45 in paperback) may even make us wonder if the book format is the most adequate medium to express these ideas.

In conclusion, *Rethinking Maps* is a refreshing inspiration for the debates in cartography and serves to (auto-)reflect on our own cartographic ideas and practices. Opposite to what the subtitle of the book states, there are no new frontiers in cartographic theory: in fact, there are no limits to thinking about maps and mapping at all, and we still have not "charted" all these fascinating possibilities.

## HISTORICAL ATLAS OF CALIFORNIA



By Derek Hayes.

Berkeley, CA: University of California Press, 2007. 256 pages, 476 maps, \$45.00, hardcover. ISBN: 978-0520252585

**Review by:** Kellee Koenig, Conservation International

From its initial black ink-engraved depictions of California as an island, to a technicolor terrain model using satellite imagery, Derek Hayes' *Historical Atlas of California* shows developments and changes in cartography as well as in the political boundaries of California. Its 34 chapters are organized chronologically and thematically, using contemporary maps whenever possible. There are also images throughout, such as posters, book covers, and photographs, to support the maps and text. The hardcover book is slightly larger than average, suggesting it would be an appropriate coffee table book.

The maps included in this atlas rightfully steal the show, with chapter text laid out as a secondary element around them to emphasize this point. The selection of maps is beautiful and interesting, presenting a wide variety in terms of theme and visual appearance.

The captions are excellent, both for describing the content of the map and providing context on its significance. The author's writing style is never too formal, perhaps even "California casual," but becomes more personal towards the end of the atlas, for example in his commentary on the artwork of a guidebook cover on page 224. The lengthy captions are well worth reading, and not just for understanding the particular map they describe. Many captions, such as that for map 360, contain information that does not relate directly to the map and is not otherwise mentioned in the chapter. This works to maintain a clean layout, but it would often have been better to have incorporated this material in the chapter text. While the different fonts used for the captions and text help differentiate the two, their layout when on the same page (e.g., p. 233) was a bit confusing at first glance. It was also bothersome to occasionally have captions placed furthest in a spread from what they were describing (pp. 190–191). Putting some maps in the Catalog, Bibliography, and Index makes those sections more visually appealing, but tends to hide those maps at the same time and it must be assumed they were included as "bonus maps" for the thorough reader to discover.

As Hayes explains in his introduction, there is something here for everyone. A fair number of the maps are whimsical propaganda, promoting California as a tourist destination and agricultural producer. Others, such as map 354 depicting the 1906 San Francisco fires, show how maps can sensationalize the information they depict. "The Burning of San Francisco" chapter especially highlights the variety of biases maps can present of the same event, area, or topic, depending on the producer and audience. Within a few pages, a collection of dramatic maps shows widespread destruction, comparatively dry military and survey maps, and enthusiastically upbeat maps of the same area with the rebuilding highlighted and the fire downplayed in order to attract investment (maps 349–359). Many maps show a California of fantasies, and not just by sea monsters drawn off the coast or a promise of perpetual sunshine. One entire chapter, "On the Right Hand of the Indies," is devoted to depictions of California as an island, and there are also early Spanish maps showing it as the location of the mythical Seven Cities of Cibola (e.g., map 22). From more modern times, several maps show Daniel Burnham's proposal for post-earthquake San Francisco (maps 360–363).

It is fitting that an atlas that begins with the discoveries of early seafaring explorers would end with scientific maps showing the application of modern breakthroughs in spatial technology in near-shore areas of California. The closing chapter also includes recent examples of creative cartographic design, showcasing maps for home décor as well as everyday activities like driving.

The strength of having these maps presented in a single book is the ability to cross-reference them, allowing

comparison between, for instance, maps 365 and 233, which both illustrate the Panama-Pacific International Exposition, held in San Francisco in 1915. The former was used to demonstrate the potential local market as part of the city's Exposition bid, while the latter map was an advertisement showing San Francisco's nationwide accessibility by railroad. Another pairing, maps 374 and 375 of the Los Angeles Aqueduct, is printed side by side to allow the reader to compare physical features on one with the aqueduct's route on the other. It is also instructive to see sequences of maps over time at the same extent and scale, such as maps 417-420 which show the evolution of San Francisco International Airport using contemporary maps. The four maps selected include the earliest map of the area (1864), and others at significant stages where cities begin to appear, the land is reclaimed from wetlands for use as an airport, and the modern airport runways are added.

While the individual maps included in this atlas may not be familiar, they can often be broadly categorized into familiar types based on cartographic style, subject depiction, etc. An exception might be maps 146–151, depicting diseños, Mexican land grant applications. Compared with the exquisite detail and professional quality of most maps in this atlas, their relatively amateur quality is readily apparent, as they were often painted by the land owners themselves. However, this appearance disguises the significance of these maps, which may have had a greater impact, than any other maps in the atlas, on California's settlement and growth in the areas depicted.

Hayes' love of the artist-historian, sculptor, painter, photographer, illustrator, muralist and author Jo Mora's work is evident, and rightfully so, as 3 of Mora's distinctive and whimsical maps appear in the atlas (maps 1, 372, and 474) with two of Mora's state maps serving as bookends for the atlas. As the state maps were published 18 years apart, it is interesting to compare the differences between them in features and cities shown, and how the state's history is told through a series of horizontal mural stripes covering Nevada. They are so rich with amusing detail that while a magnifying glass might be required to read all the text, it is well worth the trouble for the visual jokes and general information. In addition to artists, the inclusion of maps by famous explorers such as John Muir (map 367) reminds us that the line between early explorer and cartographer was often blurry, and can still be so today.

Today, most residents explore the state by car, and this topic is highlighted in the chapter "From Bike Paths to Freeways," which focuses on major transportation arteries and California's car culture. A Thomas Brothers' map from their popular street guides, their distinctive style easily recognized by most California drivers who pre-date online mapping services and GPS, might have seemed an appropriate choice for this section, but oddly enough is not to be found.

The wide selection of maps depicting a variety of events could easily lead the reader to believe that at least one map exists depicting every occasion in the state's history. Indeed, it seemed unusual to have any event, such as the LA riots described on page 233, mentioned in the text without an accompanying map. Understandably, these instances are rare. On the other hand, while the physical terrain model of the Los Angeles Aqueduct's route is interesting in itself and relevant to the chapter on supplying the cities with water, the inability to properly photograph it makes the inclusion of map 376 seem unnecessary.

Most of the maps in the atlas bleed off the pages, making for an interesting appearance and maximizing the page space devoted to the maps. As most maps selected for the atlas exceed the atlas' page size at their original size and scale, a cropped selection of many maps is included when shrinking the map was infeasible or undesirable. In the case of maps 374 and 379, a section as well as the entire map is shown to illustrate different points while telling the story of the Los Angeles Aqueduct.

With such detailed maps containing information equally spread throughout the space, especially with a cropped selection, the tolerance for page trimming becomes more demanding than other visuals. As such, there is a risk of the maps being cropped more than planned, as pages are trimmed just a bit less than originally intended as a result of the printing and binding process. This is especially true for maps bleeding off the left-hand page, where a small variation in trimming the page's edge occasionally resulted in the appearance of being cropped short, as some labels were missing the first letter (e.g. maps 371 and 388 in the reviewer's copy). This is minor effect, and in no way detracts from the overall visual appeal of the atlas.

One effect of the page bleed is that many pages do not display a page number, which can make finding a particular page harder. However, as numbers are only omitted for two consecutive pages at most, it is only noticed when the reader wishes to find a specific page.

The Historical Atlas of California is a gorgeous book that would be enjoyed by anyone who loves California, or who appreciates beautiful and historical maps generally. It provides one of the most visually engaging ways to learn about that state's fascinating history, and would be a welcome addition to any collection.

## TYPOGRAPHIC MAP OF CHICAGO



By Axis Maps, LLC.

Axis Maps, 2011. 24" x 36", color, also available in grayscale. \$30, offset print on 100 lb semi-gloss paper, store.axismaps.

Review by: Jonathan Munetz, University of Wisconsin-Madison

Axis Maps' typographic map of Chicago is one in a series which includes depictions of Boston, New York, San Francisco, and Washington, D.C. On each map, the roads, rivers, neighborhoods, parks, and other features of the city are fashioned purely out of type. This form is not new; the first such map was introduced in 1773 in Germany<sup>1</sup>, but it is certainly not common. Axis Maps' typographic maps aim to be both reference and art maps, and the tension between these goals drives the design decisions behind them. That tension has led to particular graphic choices, some in line with familiar, accepted conventions, and others that are innovative, artistic features that grab the viewer's attention (Figure 1).

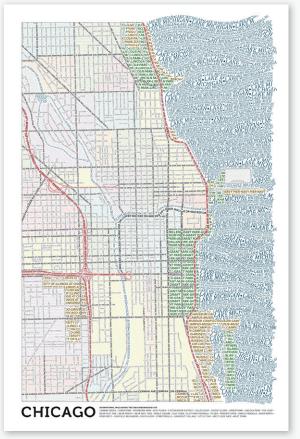


Figure 1. Axis Maps' typographic map of Chicago, 24" x 36", color.

The type, not surprisingly, is this map's most remarkable feature. Overall, the typeface choices work harmoniously