particular but also the computerization of society and culture in general. The ineluctability of paradox in humanity constantly reminds us that mere technological power and scientific knowledge exalt human nature but do not bless it. We must strive to liberate ourselves from the domination of technological innovations at the ontological, epistemological, and ethical levels in order to make our planet a better place to live. If widely read and understood, Curry's new book will facilitate our work toward that goal.

Key Words: ethics, GIS, social implications of information technology.

References

Curry, M. R. 1996. The work in the world: Geographical practice and the written word. Minneapolis: University of Minnesota Press. Pickles, J., ed. 1995. Ground truth: The social implications of geographic information systems. New York: Guilford Press.

Concise Historical Atlas of Canada. William G. Dean, Conrad Heidenreich, Thomas F. McIlwraith, and John Warkentin, eds.; Geoffrey J. Matthews and Byron Moldofsky, cartographers. Toronto: University of Toronto Press, 1998. xx and 180 pp., 67 plates, and notes. \$85.00 cloth (ISBN 0-8020-4203-1).

Reviewed by Zoltán Grossman, Department of Geography, University of Wisconsin-Madison, Madison, WI.

The Historical Atlas of Canada, published in three volumes between 1987 and 1993, still stands as the flagship of North American historical atlases. The Concise Historical Atlas of Canada, published in 1998, is a long-awaited condensed version of the three-volume series. This immensely complex atlas project began three decades ago, and the project's multiple sources of research and development support (Piternick 1993), would make its own fascinating map. Far from simply retelling Canada's story, The Historical Atlas of Canada itself became a milestone in the country's scholarly and cartographic history.

The full three-volume set divided Canada's history into three periods. Volume 1 carried the history of the northern half of North America from 18,000 BC to 1800 AD, volume 2 narrated Canadian history to 1891, and volume 3 took the story to 1961. The outcome included 193 self-contained plates (double-page spreads), covering an immense range of national and regional themes, presented in imaginative, cross-cutting juxtapositions. With a mixture of reference and thematic maps, the atlas provided a balance between the "application-neutral" reference atlas and the "application-specific" thematic atlas. The atlas plates exhibited creative collaboration between historians and cartographers (Ommer and Wood 1985).

The impact of the project went far beyond Canada's borders, as the innovative maps by University of Toronto cartographer/designer Geoffrey J. Matthews pointed toward new directions for historical cartography. The plates integrated maps with charts, graphs, diagrams, illustrations, and short interpretive narratives, using feathered map boundaries instead of clear neatlines and employing a subtle color palette and attractive reproductions of historic maps. Many of the plates presented a refreshingly

dynamic portrayal of history, with flow arrows and a lack of emphatic boundaries communicating the complex movements and interrelationships that are often oversimplified in historical atlases. The multi-image plates were sometimes so overwhelming that the legend box for a particular map could be difficult to find (a consistent legend fill color would help).

The Concise Historical Atlas of Canada was devised to appeal to a general public that might not have purchased the three-volume set and to be used in history and geography classes. The new atlas displays 67 plates out of the 193 in the full set. In what must have been a difficult process, editors William G. Dean, Conrad Heidenreich, Thomas F. McIlwraith, and John Warkentin selected the plates they felt best reflected thematic, geographic, and temporal balance. The preface to the concise edition outlines the editors' wish to direct "our attention to those plates that mirror the social and economic experiences of ordinary people rather than the political and military activities associated with individual heroes."

The concise edition uses a different structure than the original volumes, with three thematic/regional sections and each section's plates organized in a roughly chronological order. "National Perspectives" presents overarching views of historical themes covering the entire Canadian landmass, divided into subsections on prehistoric and native Canada, exploration, territorial extent, population, transport and urbanization, the economy, and society. "Defining Episodes" presents historical events and turning points, such as the Seven Years' War, the War of 1812, key immigration waves, and the world wars. "Regional Patterns" presents regional case studies of larger national trends or unique regional developments, divided

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into two sections: "The East," and "The West and the North." Each section is introduced with a concise essay that places the plates in context of a larger overview of historical developments. Each plate is referenced in the "Notes and Sources" section in the back of the atlas, which provides thorough explanations of map details and useful thematic bibliographies. Thus, the concise atlas can be used not only as a reference tool but also as a first stop for students researching national and regional themes. It could perhaps have served this purpose even better if it had been reformatted as a map-intensive textbook. Nevertheless, it serves many of the same purposes as an educational curriculum publication.

Like history textbooks, the three-decade atlas project has clearly played a role in bolstering a national narrative (Sparke 1998). The project coincided with some of the greatest challenges to Canada's national identity in the entire history of the country. Québécois separatism, constitutional reform, reassertions of First Nations sovereignty, and the cultural/economic tidal wave from the United States can be viewed as continuations of the atlas narrative, which halted in 1961. Arguably, these upheavals could already provide enough material for a compelling volume 4. They were also clearly reflected in the development of the atlas, which provided a cartographic bulwark for Canada's distinctive identity.

Rather than simply retelling national history for a scholarly or public audience, historical atlases are active agents in the state-building process or in building the popular legitimacy of an existing state. The Concise Historical Atlas of Canada makes this purpose explicit in its Preface by stating the hope that the book will make a "significant contribution to Canadians' understanding of one another and foster fuller knowledge and pride in their country." The editor of volume 1, R. Cole Harris, noted that "from the beginning of the European encounter with North America, developments in the north, which led to Canada, were different from those farther south, which led to the United States. The country's southern boundary is not a geographical absurdity."

The three-volume set, published in both official languages of Canada, took special pains to present Francophone and Native histories with the same care as the dominant Anglophone settlement narrative. A few reviewers have focused critically on the presentation of First Nations histories. One suggested that focusing on cultural areas in the precolonial era and material cultures in the colonial era "divides the historic from the prehistoric" (Konrad 1988). Another asserted that the atlas gave ample coverage to counterhegemonic sovereignties of early Native peoples—and was even noted in a notorious British Columbia land rights trial—but may have incorpo-

rated them into a later overarching Canadian "mosaic" (Sparke 1998). Compared to other national historical atlases, the project went to great lengths to reflect the history of national and linguistic "minorities," but more work remains to be done on modern periods.

One of the most important problems pointed out with regard to the three-volume set was not corrected in the concise edition: the lack of an index (Woodward 1988). A place name and thematic index would have been an immense help to students or foreign scholars without an intimate knowledge of Canadian history. The frustration of not finding an index grows partly out of the greatness of the atlas, as if a world-class city such as New York or Paris lacked a phone book, or a nation such as Italy or China never bothered to publish a cookbook. An index is also useful for exposing interrelationships between phenomena in the same place. It may be revealing, for instance, that Amherstburg appears on plates dealing with transportation routes, the Iroquois, the War of 1812, and timber exports. The editors plan a separate comprehensive index covering all three volumes and the concise edition. but that is little solace to a secondary school student who is searching the back of the atlas in vain.

The concise edition's attractiveness and cogent organization may understandably lull readers who have not studied the full set into assuming that the new version is comprehensive. Yet the editors were forced to omit many interesting plates that appear in the full set, incluir "Iroquoian Agricultural Settlement" and "Norse Voyag, and Settlements" from volume 1, "Dispersal of the Manitoba Métis and the Northwest Rebellion, 1870–1885" and "The Changing Face of Labour Protest" from volume 2, and "Working Worlds" and "Sea and Livelihood in Atlantic Canada" from volume 3. Oddly, the national economic subsection contains no plates from volume 2, which covered most of the nineteenth century.

In selecting plates that showcase only one third of the full set, the editors perhaps inevitably emphasized hegemonic themes over counterhegemonic trends in Canadian history. Lacking the Riel rebellions, labor strikes, and other events that mitigate against the national story of territorial and economic expansion, the concise edition risks spotlighting the "Canada-that-is" at the expense of the possible "paths not followed." Though plates covering the colonial era portray numerous clashing choices, the concise edition plates on more recent eras leave the impression of an inevitable progression toward the contemporary status quo. For this reason alone, the three-volume set remains a necessary presence alongside the concise atlas, and will remain invaluable for decades to come.

The major legacy of *The Historical Atlas of Canada* series is that it has shown what is possible in the art and sci-

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ence of the historical atlas, which blends time and space in the setting of a particular place. The project has already inspired the development of smaller regional atlases throughout the continent. My own work in helping to develop Wisconsin's Past and Present: A Historical Atlas (Wisconsin Cartographers' Guild 1998) owed much to the sensitive cartography and compact text of the Canadian series. The Concise Historical Atlas of Canada will make the model available to a wider audience, and hopefully inspire similar national projects in the United States and other countries.

Key Words: Canada, cartographic presentation, historical geography, national atlas.

References

Gentilcore, R. L., ed. 1990. Historical atlas of Canada. Vol. 2, The land transformed, 1800–1891. Toronto: University of Toronto Press.

Harris, R. C., ed. 1987. Historical atlas of Canada. Vol. 1, From the beginning to 1800. Toronto: University of Toronto Press.

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- Kerr, D., and D. W. Holdsworth, eds. 1993. Historical atlas of Canada. Vol. 3, Addressing the twentieth century, 1891–1961. Toronto: University of Toronto Press.
- Konrad, V. 1988. Review of Historical atlas of Canada I: From the beginning to 1800. Annals of the Association of American Geographers 78:368–72.
- Ommer, R. F., and C. H. Wood. 1985. Data, concept, and the translation to graphics. Cartographica 22:44–62.
- Piternick, A. B. 1993. The historical atlas of Canada: The project behind the product. *Cartographica* 30:21–31.
- Sparke, M. 1998. A map that roared and an original atlas: Canada, cartography, and the narration of nation. Annals of the Association of American Geographers 88:463–95.
- Wisconsin Cartographers' Guild. 1998. Wisconsin's past and present: A historical atlas. Madison: University of Wisconsin
- Woodward, David. 1988. Review of Historical Atlas of Canada, edited by Cole Harris. Canadian Geographer 32:74-75.

The History of Cartography. Volume 2, Book 3, Cartography in the Traditional African, American, Arctic, Australian, and Pacific Societies. David Woodward and G. Malcolm Lewis, eds. Chicago: University of Chicago Press, 1998. xxii and 640 pp., maps, diags., photos., tables, app., notes, refs., and index. \$150.00 cloth (ISBN 0-226-90728-7).

Reviewed by Robert Rundstrom, Department of Geography, University of Oklahoma, Norman, OK.

David Woodward states the purposes of this volume in his preface: "[to]... bring into the history of cartography maps that had previously been ignored or relegated to the margins of the subject," and to accomplish a "redefinition and expansion of the canon of early maps." He and coeditor Malcolm Lewis obviously succeed on both counts, producing a unique and valuable reference that yields as many good questions as answers. I am troubled by its overall structure, but about the content I am overwhelmingly positive.

The title indicates the five parts into which the book is organized. The short section on Africa consists of a brief essay by a South African archeologist on the rock art of southern Africa and geographer Thomas Bassett's chapter on maps in intertropical Africa. The Americas are next, consuming fully half the volume and including Lewis's long-awaited summation of North American Indian and Inuit maps, easily the longest chapter in the book (131 pages), art historian Barbara Mundy's long essay on Mesoamerica, geographer William Gartner on the central Andes, and a final short piece about lowland South America and the Caribbean by anthropologist Neil Whitehead. Elena Okladnikova, a museum ethnographer, provides a short chapter about subarctic and arctic Eurasia, and two essays by anthropologist Peter Sutton

comprise the unit on Australia. The final section on the Pacific Basin includes an essay on Papua New Guinea by anthropologist Eric Silverman, another anthropologist, Ben Finney, on Oceania (Micronesia and Polynesia except for the Maori), and Phillip Barton, a former map curator, on the Maori. Only Silverman and Finney appear to have spent substantial time with the people who made the maps they study. A brief introduction and conclusion by the editors bracket these substantive contributions. The book is lavishly annotated with extensive discursive footnotes, and illustrated with 459 monochrome images and twenty-four color plates.

If the cartographic voyeur in you is thirsty, drink up. In these pages you will find Iroquois wampum or road belts, examples of Eurasian and North American pyroscapulimancy, Tabwa (Bantu) embodiment of places through cartographic scarification, Evenk (Siberian plateau) shamans' personal mystical journeys drawn on their clothes, Nivkhi (northeastern Russia) maps on birch ritual vessels meant to hold the hearts of bears, Diyari wooden toas of South Australia, and Wopkaimin trophy arrays of animal bones in Papua New Guinea. The overall impression is one of a map-obsessed world—and a world absolutely different from "ours," a point I will return to below.

On the whole, the book represents a huge achieve-

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Constitute: 8, L., ed. 1990, Historical adm of Cantets. Vol. 2, The hard wanginvoyd, 1800–1681. Toronto: University of Eq. onto Press.

Harrie, R. C., ed. 1987. Historical etha of Carocia. Vol. 1, French and Segiming to 1800. Toronto: University of Toronto.

Kerr, D., and D. W. Holdsworth, eds. 1993. Historical also of Conada. Vol. 3, Addressing the remaint century, 1891–1941. Testings University of Testing Press.

Komind, W. 1988. Raview of Flutorical adas of Cannala 1: Press delugimating to 1800! Annells of shadosociation of American Geogmahers 20:308–72.

Onione, R. F., and C. H. Wood, 1985. Data, concept. and the translation to enables. Communities 72:44-62.

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