

together, these chapters and the appendix comprise an excellent multifaceted introduction to the most recent trends in automated cartography. Having said this, it should be noted, however, that the chapter on computer-assisted cartography does not mention the use of the computer in map design, nor recent trends in capabilities of presentation graphics software. Since the focus of this book is on map use rather than map production, this does not constitute a glaring omission.

Contained in this volume is an excellent glossary of selected terms which includes several of the acronyms that have invaded our vocabulary during recent years. Examples of these are: TIGER, SPOT Image Corporation (who knew what the acronym SPOT was derived from?), NAVSTAR Global Positioning System and GNIS.

In summary, *Map Use and Analysis* is a readable and current overview of the "world of maps." This reviewer concludes that the aim of introducing this subject with clarity is accomplished and this volume should be a welcome addition to the library of anyone who is at least casually interested in maps.

#### AN ELUSIVE REFERENCE: THE 1:1 MAP STORY

Jeremy Crampton, Penn State  
University

... in that empire, the art of cartography reached such perfection that the map of one Province alone took up a whole city, and the map of the Empire which had the size of the Empire itself and coincided with it point by point . . .

Like many cartographers, I have heard of the "story of the ungeneralized map," i.e., a map that had a scale of exactly one-to-one, so large it covered the entire country. An interesting anecdote that might be worth investigating.

Some versions of the story say it was abandoned, and all that was left are a few rotting remains in the deserts. A similar version comes from Lewis Carroll's *Sylvie and Bruno Concluded*, a minor proselytizing work for children, in which a map's scale is increased until they get a one-to-one map; "but the farmers objected, saying it would block out the sunlight." No rotting maps in the deserts, but perhaps the telling of the quote had distorted it. Muehrcke's *Map Interpretation* includes this version.

For quite a long time I thought this was, in fact, the story. Then, two years ago, I was reading a little book by the French avant-garde cum post-modernist Jean Baudrillard called *Simulations*. Baudrillard begins by recounting "the Borges tale where the cartographers of the Empire draw up a map so detailed that it ends up exactly covering the territory. . . but where the decline of the Empire sees this map become frayed and finally ruined, a few shreds still discernible in the deserts . . ." (p. 1). This sounded more like it — Borges and not Carroll. But where? No reference is given by Baudrillard, but readily found, surely. Thus did I enter the labyrinth (a favorite metaphor of Borges). There can be few authors whose work is more obscurely scattered, more fleetingly published in the original, than Jorge Luis Borges. Searches through his collections like *Ficciones* were to no avail.

Less addicted to the study of cartography, succeeding generations understood that this widespread map was useless and not without impiety they abandoned it to the inclemencies of the sun and winters . . .

Then, in *Cartographica*, 26, p. 116, D.R.F. Taylor used the quote and confirms that it is by Borges, despite a citation in a 17th century book called *Viajes de Varones Prudentes* by Suarez Miranda. Perhaps Borges was quoting from

this book? No; there is no "Miranda" book; Borges had made it up. I could not track it further, and continuing perusal of Borges' work itself was still fruitless. Although I now had the exact quote I had again come to a dead end.

Around this time I heard that a geographer at SUNY Binghamton, Matthew Edney, had coincidentally also searched for this story. From him I learned it was published in a book called *Dreamtigers* (originally *El Hacedor*, "The Maker"). So to the library. Such a book was listed, and was not checked out! Again, the solution seemed to be at hand.

I went to get the book. It was not on the shelves. I checked the availability again; it was not checked out. The book was just missing, stolen perhaps. Not only that; but ditto for the original Spanish version. I began to entertain notions of a conspiracy.

There followed another Borges-like twist. I had mentioned my search to Peter Gould at a pre-semester function over wine and cheese. He had heard of the story but couldn't say where. The next day I saw him at the library. The previous night, he had been reading a French cartography book by Sylvie Rimbert (*Carto-Graphies*, see his review in CP7) and found the same quote provided by Taylor that I had been telling him about a few hours previously. We were both amazed at the coincidence. I checked the library again, and noticed that **another** copy of *Dreamtigers* was kept in the Rare Book Room. I put my order in, and sat there with a friend, expecting that the exact page we wanted would have been carefully removed from the book, or that the librarian would come back with a puzzled expression on his face saying that the book could not be found, he was very sorry . . .

But the book did indeed arrive, signed by Borges himself. After

some searching, page 90: under the heading "On Rigor in Science" is one small paragraph with the same quote Taylor and Rimbart had provided, and that I thought was from a larger work (it begins with three ellipse dots as if there is more). Borges says of this book elsewhere ("An Autobiographical Essay," *The Aleph and Other Stories*, 1970, p. 253) that it was made up of odds and ends he found "going through [his] drawers one idle Sunday" in response to a request for a new book. Appropriate: the source of my "Nile" was Borges' drawers.

*In the deserts of the West some mangled ruins of the map lasted on, inhabited by animals and beggars: in the whole country there are no other relics of the disciplines of Geography.*

Thanks to the following geographers, without whom my search would still be going on: Roger Downs, Peter Gould, Alan MacEachren, John Krygier, and especially Matthew Edney.

### BIG GLOBE IDEA

Tom van Saut, a California artist and environmentalist, has all but finished developing what he promises will be the most natural looking model of Earth ever made. He calls his creation Geo-Sphere. It is being made from high resolution pictures taken from satellite photos of Earth. The pictures will be adhered to an acrylic sphere portraying an image of the planet as it appears from space.

The Geo-sphere will rotate on its axis and interior lighting will make cities appear as they do at night. Live images of the world's weather will be projected onto an atmosphere of clear plastic surrounding the globe.

According to van Saut and Van Warren, his collaborator and a computer expert for NASA, the Geo-Sphere will foster understanding of Earth as a whole, including such issues as global warming, the loss of rainforests, desertification

and the depletion of the ozone layer. The pair hope ultimately to be able to produce 12 to 16 inch globes for home and school use at affordable prices. The prototype is 7 feet in diameter. When finished, models like it will cost tens of thousands of dollars. The National Geographic Society has included the flat image in its 1990 atlas. van Saut says that through his globe, he wants to create "... a new understanding of Earth as a dynamic, interrelated, closed system upon which we are having a dramatic impact."

*GENIP News, November '90*

### PACIFIC ISLAND HISTORICAL AND TOURIST MAPS AVAILABLE

**Saipan, Mariana Islands:** "Tourist Map of Saipan". Pictorial map with notes on World War II, oceanographic information and descriptions of various attractions of interest to the visitor. Published in English and Japanese. Contact: Marianas Visitor's Bureau, P.O. Box 861, Saipan, M.P. 96950.

**Saipan:** "Saipan Battlefield Map — 1944". Describes the twenty-five day battle, the U.S. route of advance and the Japanese defense of the island. Quite a different map from the above. Contact: Marianas Visitor's Bureau, P.O. Box 861, Saipan, M.P. 96950. Price \$3.50.

**Guam, Mariana Islands:** "Pacific Explorer's Map of Guam". Pictorial with interesting notes on history, geography and culture. Published in English and Japanese. Contact: Guam Visitor's Bureau, P.O. Box 3520, Agana, Guam 96910.

**Pauau & Peleliu, Western Caroline Islands:** "Tourist Map of Palau" and "Battlefield Map of Peleliu". Pictorial with description of history, geography and culture of the last remaining Trust Terri-

tory to evolve out of World War II with inset maps of remote outer islands. Peleliu Map describes American attack of 1944 and Japanese defense tactics and cave warfare. Contact: Western Caroline Trading Company, P.O. 280, Koror, Palau W.C.I. 9969940. Price \$4.50.

**Truk, Eastern Caroline Islands:** "Dive Map of the Ghost Fleet of the Truk Lagoon". Pictorial map describing history, geography and U.S. Navy Task Force 58's aircraft carrier raid on the Japanese fleet in 1944 (Japan's equivalent of Pearl Harbor). Contact: Truk Visitor's Bureau, P.O. Box FQ, Moen, Truk, Federated States of Micronesia, 96942. Price \$3.50.

**Kosrae:** "Tourist Map of Kosrae". Description of 18th century whaling activities and the great mammal of the sea, early missionaries and traders. Contact: Department of Conservation and Development, Division of Tourism, Kosrae State Government, F.S.M. 96944. Price \$2.50.

**Pohnpei:** "Map of Pohnpei and the Ancient Ruins of Nan Madol". Description of the culture and the ceremony attending the ritual drinking of sakau, contains note on ruins of a lost Pacific civilization with inset map. Contact: Pohnpei Office of Tourism, P.O. Box 44, Kolonia, Pohnpei, F.S.M. 996941. Price \$2.50.

### NTIS CITATIONS

**Display Methods for Geographic Data Sets.** J. Landrum. Naval Oceanographic and Atmospheric Research Lab., Stennis Space Center, MS. 1989, 6pp. NOATL-PR-89-041-351. Published in *Proceedings of Oceans '89*, pp. 910-913, Seattle, WA, 18-21 Sep 89. AD-A224 854/0/WNR; price code: PC A02/MF AO1.

A pixel based contouring algorithm is described and used to display three sample world wide data sets. The use of contouring, color coding and hill shading is discussed and related to the spatial frequency content of the data. Contouring has problems in steep areas where the contour lines run together. Color coding brings out the low frequency content of the data. Hill shading brings out the high frequency content or texture. Color coding and hill shading may compliment each other when the data has a mixed high and low frequency content. Reprints.

**Canada. Surveys, Mapping and Remote Sensing Sector: Annual review 1988-89.** Surveys, Mapping and Remote Sensing Sector, Ottawa (Ontario). c1989, 52pp. SSC-M51-28/1989, ISBN-0-662-57167-3. Text in English and French (Bilingual). MIC-90-05122/WNR; price code: PC E07/MF E01.

First annual review of the Sector, which is responsible for the fundamental surveying and mapping of all of Canada, and for fostering the development of remote sensing technologies and applications. This report gives a summary of the year's activities, and details on the collecting of geographic information, major conferences and activities, advisory committees, awards, and production highlights. Financial data is also included.

**Gazetteer of Canada: Prince Edward Island. Third edition.** Canadian Permanent Committee on Geographical Names, Ottawa (Ontario). c1990, 57pp. SSC-M86-13/1990, ISBN-0-660-54845-3. Text in English and French (Bilingual). MIC-90-04996/WNR; price code: PC E07/MF E01.

Gazetteer including some 1,900 names of populated places, rivers,

lakes and other cultural and natural features in the form approved by the Canadian Permanent Committee on Geographical Names. In addition, rescinded names are included, as are formerly approved names, cross referenced to their current forms. Each name is identified by lot number, county, map/chart area, and latitude and longitude. A glossary of generic terms and detailed information on establishing of names are included also.

#### WHERE IN OUR WORLD

"American Airlines has chosen National Geography Awareness Week, November 11-17, to launch a new program to help students learn more about the world in which they live." This quote was taken from a news release sent to NACIS along with a teacher's manual for the project. The teaching materials (which include a colorful time zone map) were created for the airline by Mazer Corporation in Dayton, Ohio. We plan to review these materials for the next issue of *Cartographic Perspectives*. In the mean time, those who would like a copy of the teaching packet should contact: Tracy Backs, The Mazer Corporation, "Where in Our World," P.O. Box 1400K, Dayton, OH 45413-9927, (513) 276-6181.

#### QUESTIONS AND ANSWERS ABOUT MAP COPYRIGHTS

*The following is reproduced (with permission!) from a pamphlet distributed by the International Map Dealers Association, PO Box 1789, Kankakee, IL 60901.*

##### What does "copyright" mean?

The United States copyright law, Title 17 United States Code Section 101, *et seq.*, provides protection to authors of original works. This includes maps. It is unlawful for any firm or individual to reproduce copyrighted works, in whole

or in part, without permission of the copyright owner.

##### Are all maps protected by copyright?

Yes, essentially all maps (except U.S. government publications) are subject to copyright. This is especially true of street maps, the vast majority of which are produced by private firms, and which are produced at great expense.

##### How do I know if a map is protected by copyright?

All commercially produced maps are covered by the copyright law. The name of the copyright holder and the word "copyright" or symbol "©" will usually be printed somewhere on the map. However, even if unauthorized copies (without copyright identification) are subsequently reproduced, copyright laws and penalties still apply.

##### Does the copyright law apply for every use?

Yes, neither a business nor an individual may reproduce copyrighted maps, in any quantity, without permission of the copyright owner. Even a single copy may be considered a copyright violation when the intended use is commercial, whether for profit or not. Specific exceptions have been made for "fair-use" reproductions according to Section 107 of the copyright law.

##### What are the penalties for violating a copyright?

The penalties allowed by law in copyright violations can be severe, and may include payment of any profits, damages, court costs and attorney's fees.

##### How may I legally reproduce copyrighted maps?

You should request permission from the holder of the copyright to reproduce a copyrighted map. Permission is usually granted by

a written contract which specifies quantity, royalty fees, and various terms pertinent to the use of the map being reproduced.

### I am a printer; if I reproduce copyrighted maps for a customer, who is liable?

You both are liable. The customer and the firm or individual who reproduces copyrighted materials without authorization can both be held liable for copyright violations.

### Are royalty fees expensive?

No. Such fees are based on reproduced quantities, area of map coverage, and detail of the particular map being used. In fact, such fees are quite low, considering the skill, time, and effort required to produce a detailed map.

### Once a copyright contract is granted, how long is it effective?

A copyright contract gives permission for a specific use and quantity over a particular time. The contract expires when the limited quantity is reached or on the expiration date indicated. Additional reprints will require renewed permission.

### Who do I contact to obtain permission to reproduce a map?

Any member of the International Map Dealers Association can provide information relative to requesting reprint permission of copyrighted maps.

## new atlases

*Atlas of the Least Developed Countries.* New York: United Nations, 1990. 43 pp. including 21 maps.

*An Atlas of Venice: The Form of the City.* London: Architecture Design and Technology, 1990. ISBN 1-85454-003-3. £125.

**Chadwick, Henry.** *Atlas of the Christian Church.* London: Paidon, 1990. 240 pp. £19.50.

**Chaliand, Gerard.** *Strategic Atlas: A Comparative Geopolitics of the World's Powers.* New York: Harper Collins Publishers, 1990. ISBN 0-06-096434-0. \$17.95.

**Dockrill, Michael L.** *The Collins Atlas of Twentieth Century World History.* Glasgow: Harper Collins, 1990. 160 pp. ISBN 0-00-435061-8. £14.95.

**Lean, Geoffrey.** *World Wildlife Fund Atlas of the Environment.* New York: Prentice Hall Press, 1990. 192 pp. ISBN 0-13-050469-6. \$29.95.

*National Atlas of Japan.* Tokyo: Japan Map Center, 1990. English ed. 218 pp. \$780. Distributed by Kinokuniya Book Store, 10 W. 49th St., New York, NY 10020.

*National Geographic Picture Atlas of Our World.* Washington: National Geographic Society, 1990. \$21.95.

**Porter, A.N.** *Atlas of British Overseas Expansion.* London: Routledge, 1990. ISBN 0-415-01918-8. £45.

**Prucha, Francis Paul.** *Atlas of American Indian Affairs.* Lincoln: University of Nebraska Press, 1990. 191 pp. including 109 maps. \$47.50.

**Roaf, Michael.** *Cultural Atlas of Mesopotamia and the Near East.* New York: Facts on File, 1990. ISBN 0-8160-2218-6. \$45.

*Wyoming Water Atlas.* Laramie: University of Wyoming, 1990. 136 pp. including 55 color plates. \$35. Payable to the University of Wyoming; Wyoming Water Research Center, P.O. Box 3067, University of Wyoming, Laramie, WY 82071.

## cartographic events

### EVENTS CALENDAR 1991

March 23-29: **ACSM/ASPRS Annual Convention**, Baltimore, MD. Contact: ACSM, 5410 Grosvenor Lane, Bethesda, MD 20814, (301) 493-0200.

March 25-28: **Auto-Carto 10: Tenth International Symposium on Automated Cartography**, Baltimore, MD. Contact: Auto Carto 10, Department of Geography, 105 Wilkeson, North Campus, State

University of New York at Buffalo, Amherst, NY 14260.

April 13-17: **Association of American Geographers 87th Annual Meeting**, Hyatt Regency, Miami, FL. Contact: AAG, 1710 16th St. N.W., Washington, DC 20009-3198.

April 22-25: **NCGA 1991 National Computer Graphics Association**, Chicago, ILL. Contact: Michael Weiner or Sharon Sutton, 2722 Merrilee Drive, Suite 200, Fairfax, VA 22031, (703) 698-9600.

May 6-10: **84th Annual Meeting of the Canadian Institute of Surveying and Mapping and 14th Canadian Symposium on Remote Sensing of the Canadian Remote Sensing Society**, Calgary, Alberta, Canada. For CISM information contact: Dave McLintock, Shell Canada Ltd., 400 4th Ave. S.W., Box 100, Station M, Calgary, Alberta, Canada T2P 2H5; (403) 232-3004, fax: (403) 232-4955. For CRSS information contact: Diane Thompson, Intera Technologies Ltd., 2500-101, 6th Avenue, S.W., Calgary, Alberta, Canada T2P 3P4; (403) 266-0900, fax: (403) 265-0599.

May 26-30: **Annual Conference of the Association of Canadian Map Libraries and Archives**, Ottawa, Ontario at the National Archives of Canada. Contact: Louis Cardinal, Cartographic and Architectural Archives Division, National Archives of Canada, Ottawa, ONT, K1A 0N3; (613) 996-7619, fax (613) 995-4451.

May 31-June 3: **The Annual Conference of the Canadian Cartographic Association**, St. Catharines, Ont. Canada. Contact: Alun Hughes, Department of Geography, Brock University, St. Catharines, ONT, L2S 3A1. Email: ggfhughes@brocku.ca.

June 3-14: **The Visualization Experience**, National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign, IL. Contact: Deanna Walker, 69 CAB 605 E. Springfield Ave., Champaign, IL; (217) 244-1996.

June 22-28: **CG International '91: Visualization of Physical Phenomena**, MIT, Cambridge, MA. Contact: Barbara Dullea, CGI '91 Secretariat, MIT Rm 5-430, 77 Massachusetts Avenue, Cambridge, MA 02139.

July 9-12: **GISDEX: Federal Geographic Information and Spatial Data Exposition and Conference**, Washington, DC. Contact: Brenda Abrams, (301) 445-4400.

September 2-6: **Eurographics '91, Annual Conference of the European Association for Computer Graphics**, Vienna, Austria.