and compass, and tips such as transfering pertinent information to the topo sheet from state highway, county, and Forest Service maps (ie. access road numbers), and tracing over the secondary roads with a heavy pencil ("A topo map is very often used under less than ideal light conditions, . . . since gravel roads are drawn pretty inconspicuously on topo maps . . . I don't want to have to squint to make out important details like roads.")

Spencer also discusses the importance of not merely owning a topo map, but learning to use it efficiently both when scouting and hunting:

"First, a hunter must be able to 'think like a deer.' In other words, he must know enough about the whitetail's biology and habits so that he can predict a buck's needs and movements with some degree of accuracy during the period he plans to hunt."

"Next, he must be able to project himself onto the map. He must be able to look at contour lines, elevation markers, stream corridors, fields, bluffs, roads, woodlots, and clearcuts, see them in his mind's eye, and know how the animal will react to different terrain features."

"Topo maps are indespensible tools that no serious hunter should be without, whether he thinks he knows his hunting territory or not. Let's face it, you don't know the land as well as the topo does."

Wegars, Priscilla (1989). "Inmates of body houses": Prostitution in Moscow, Idaho, 1885-1910.

Idaho Yesterday 33 (Spring), pp. 25-37. reviewed by Karl Proehl Penn State University

Referencing early fire insurance maps, the author has traced the

location of houses of prostitution and the people who inhabited them. The earliest fire insurance maps of Moscow (1888 and 1889) show no buildings labelled "female boarding"—the euphemism used for such establishments. The first two "boarding houses" appear in 1891, and eight such structures appear in subsequent maps (1896 and 1904). Newspaper accounts can sometimes be coordinated with the fire insurance maps to provide information on the size, and to some extent the type of establishment. By 1910, female boarding houses disappeared from the Moscow fire insurance maps.

## cartographic artifacts

#### INJECTING THE GEO-CARTO-GRAPHIC INTO PUBLIC THINKING

Peter Gould Penn State University

Under the strong leadership of Professor Roger Brunet, of La Maison de la Géographie, Montpellier, and the perceptive investment of the publishing house of Reclus, we are beginning to see what computer cartography can do to make the spatial and geographic dimensions of human existence a present force and influence in public awareness, education and thinking. Quite apart from the quarterly MappeMond, whose color plates are the envy of traditional journals, Reclus issues a bi-monthly 'newsletter' Informations Reclus, now in its 16th edition (juin, 1989), of 12 pages.

Brunet's editorial Contradictions sets the tone of this issue as he comments on the apparently insatiable appetite of the media and 'decisionmakers' for scientifically impeccable data to inform the complexities of modern life. Ironically, such expectations lead to some difficulties—the 'contradictions' of the editorial's title.

Reclus, with its growing reputation and graphic publications on space, place, region, town, country, and continent, is deluged with requests for information. While these are flattering, they simply cannot be fulfilled with the immediacy demanded. Few outside of the cartographic profession realize the number of hours of work that may have to go into single plate or graphic image. Unfortunately, and in an ironic twist, the demand for applied cartographers also leads to aggravating, and totally unfounded rumors that geography is somehow moving away from its traditional teaching tasks towards . . . consulting, a word which appears to lack the requisite tone of academic purity in France, and seems almost tainted with a Victorian gentlemen's disdain of 'trade.' God forbid that geography and geographers should produce something useful!

At the same time, access to policy relevant information becomes more and more difficult. Data banks are often generated at great expense by the public authorities, who realize, perhaps better than most, that information is power. And power is ultimately at stake here, in a country whose civil servants have bitterly opposed a Freedom of Information Act. Proposals about future censuses are worrying, and several countries in Europe are proposing to merge in a Common Market with very little idea of what the real consequences might be.

What is required is not simply more information, but information presented in such a way that its many implication can be teased out. Ultimately a democratic form of life depends on access to genuinely public information, information that increasingly

seems to be guarded by bureaucracies afraid of the demos. Brunet, and the carto-chevaliers of Reclus, are doing everything in their power to prevent the gradual, but increasing erosion of the public's right to information, information that truly becomes informing when it is presented in all its dramatic visual impact on the map.

This issue reviews five recent publications, including the Atlas des Villes de France, the first volume in a new series on Territorial Dynamics (Dynamiques du Territoire); L'Atlas Mondial des Libertés (World Atlas of Freedoms), with the support of the two international groups, Doctors Without Frontiers, and Reporters Without Frontiers; and Les Géographies Universelles et le Monde de leur Temps, a study of a world and time when Alexander von Humboldt's Kosmos, and Elisée Reclus' Géographie Universelle, were to be found prominently in every educated home. Perhaps especially timely is La France dans L'Espace Européen, helping the French people to visualize the implications of a changing Europe for them; and Les Villes "Europeennes," another work that encourages thinking beyond the national scale. The range and vitality of these works raises the question: where are their equivalents on the west bank of the Atlantic River? After all, we are meant to be good at this sort of thing: 'computer technology' is our middle name. Is it possible that technology is not enough? Could it be that it takes a vivid and persipient geographic imagination to produce works like these? An imagination grounded in a truly geographic, and not merely technical, education? Could it be that sitting at a CRT all day is not enough?

Not that technical matters are ignored: for example, reviews of CD-Rom plus Hypercard include a micro-atlas of francophone America, complied by the geographers at Laval (Québec). Even this anglo- saxon, who lives in Lemont, Pennsylvanie, and whose county seat is Bellefonte, never realized the overwhelming domination of the francophone presence in eastern America (Figure 1). There hardly seems a space for those unfortunate descendants of the barbarians living on the offshore islands of Europe. Hypercard, interrogated through Hypertalk, is also the basis for the research of cartographers at Nice, research that forms the core of extraordinarly rapid atlas production.

In brief, French cartographers and geographers seem to have taken to the computer, particularly the Macintosh environment, with a speed, imagination and practical engagement that leaves others standing. Reclus is to be congratulated on its forward look. We have much to learn when it comes to the thinking task of transforming technical ability into production pro bono publico.

Further information may be obtained from Informations RECLUS, Maison de la Géographie, 17 rue Abbé de l'Eppé, 34000 Montpellier.



Figure 1: Extrait de La Francophonie en Amérique du Nord (Université Laval, Québec), un affichage Hypercard sur Macintosh

#### **CANADIAN MAPPING**

Two recent publications focus on the mapping of Canada. Exploration on the History of Canadian Mapping: a Collection of Essays, edited by Barbara Farrell and Aileen Desbarats, provides a selection of twenty articles divided into four categories: research background; exploring [and the mapping of] the coasts; routes and patterns of settlement; and survey and resources which focuses on the input of surveyors in Canadian mapping. This 1988, 274-page publication comes in hard cover

(\$35) and paperback (\$25).

Early Canadian Topographic Map Series: the Geological Survey of Canada, 1842-1949 by Lorraine Dubreuil is a catalog/union list of all topographic maps produced by the Survey before 1949. Price: \$15 Canadian.

Both publications are available from the Association of Canadian Map Libraries and Archives, c/o Cartographic and Architectural Archives Division, National Archives of Canada, 395 Wellington St., Ottawa, Ontario K1A 0N3. PUBLISHED SEARCH Computer Aided Mapping. January 1987-April 1989 (Citations from the NTIS Database).

National Technical Information Service, Springfield, VA. May 89, 69p. [Cited in NTIS Newsletter, Vol. 89, No. 29]

This bibliography contains citations concerning theoretical aspects and applications of computer techniques in cartography. Topics include automatic mapping, discussions of data bases, and computerized photomapping. Satellite image analysis and processing techniques, and descriptions of specific mapping projects are discussed. (This updated bibliography contains 123 citations, 68 of which are new entries to the previous edition.)

The National Technical Information Service (NTIS) is a selfsupporting agency of the U.S. Department of Commerce. It provides access to the results of both U.S. and foreign governmentsponsored R&D and engineering activities. As the U.S. Government's central source for scientific and technical information, NTIS announces more than 60,000 summaries of R&D and engineering activities annually. It can provide the complete technical reports for most of these results. NTIS also manages the Federal Computer Products Center which provides access to software, data files, and databases produced by Federal agencies. For additional information, call (703) 487-4780. (NTIS Newsletter 89:29, 1989)

# SEISMICITY DATA AND SERVICES

The National Geophysical Data Center (NGDC) Earthquake Data Base holds information on more than 500,000 earthquakes, known or suspected explosions, coal bumps, rockbursts, quarry blasts, and other earth disturbances recorded worldwide for the period 2100 B.C. to 1987. It includes (where available) date and origin time of the event, location, depth, magnitude, maximum intensity, and related earthquake phenomena (including faulting, tsunami, volcanism, and resulting casualties and property damage). Summary of Earthquake Data Base, a publication available free from NGDC, describes the data base in detail.

The Earthquake Data Base was formed from data furnished by the U.S. Geological Survey (in earlier years by the U.S. Coast and Geodetic Survey and the National Oceanic and Atmospheric Administration), the California Institute of Technology (Pasadena), the University of California (Berkeley), the California Division of Mines and Geology (Sacramento), the Canadian Earth Physics Branch, the Institute of Physics of the Earth of the USSR, the Earthquake Research Institute of Japan, and about 20 other worldwide sources. NGDC and the World Data Center A for Solid Earth Geophysics provide a variety of data outputs from this extensive data base to the scientific and engineering communities.

These data may be purchased in a variety of formats. Please refer to the appropriate product number when ordering data or services. § The Entire Earthquake Data Base. The entire Earthquake Data Base is available on magnetic tapes; please specify 1600 or 6250 bpi. (Product number 121-A07-001; price is \$341 for one magnetic tape at 6250 bpi; \$361 for two magnetic tapes at 1600 bpi).

§ Earthquake Data Base Regional Files. The Earthquake Data Base comprises 11 files of data; each file may be ordered separately for \$141 per file. Output is on magnetic tape.

§ Quarterly Updates of Preliminary Determination of Epicenters (PDE) File. Quarterly updates are generated for the PDE file (listed above). Output is on 1600 bpi magnetic

tapes as data becomes available (product number 121-P07-001; \$364 for one year).

§ Earthquake Data Base Retrievals. A search may be generated using any combination of the following elements:

—Geographic boundaries (top, bottom, left, right)

 Area within a radius (in kilometers or degrees) around a center point

-Time period

-Magnitude range

-Modified Mercalli intensity

-Depth

—Cultural effects (e.g. damage, casualties)

 Associated phenomena (e.g. faulting, tsunamis, volcanism) The retrievals are available in three output formats: on computer listing (121-A04-CUS, \$116), on 1600 bpi magnetic tape (121-A07-CUS, \$207), or on 5.25" highdensity IBM® PC compatible floppy diskette (121-A25-CUS, \$146). A publication-quality map is included in each of the retrievals. The maps are produced using PostScript™, a versatile and powerful graphics language for laser printers. The maps are printed at 300 dpi resolution on 8.5" x 11" paper. The PostScript programs used to produce the maps are available on floppy disks. This makes it possible for you to customize the maps yourself and to easily add other types of data to the maps.

§ Specialized Data and Analytical Services. Seismicity services have recently been expanded to include customized data and analysis services. These services might include such routine activities as: (1) reformatting earthquake data, (2) seismicity related graphics, (3) catalog merging, or more complex tasks such as network and catalog evaluation and analysis.

§ Educational Tools. Earthquake publications, printed maps, and slide sets are also available from the National Geophysical Data Center. For the latest listing of these products request free brochure *Publications*, *Maps*, and *Data Services*.

[The prices quoted here are valid through September 30, 1989. Prices applicable after that date may be obtained by calling (303) 497-6472.]

U.S. Department Of Commerce regulations require prepayment on all non-federal orders. Please make checks and money orders payable to COMMERCE/NOAA/NGDC. All foreign orders must be in U.S. Dollars drawn on a U.S.A. bank. Do not send cash. Orders may be charged to an American Express card, MasterCard, or VISA card by telephone or letter; please include credit card account number, expiration date, telephone number, and your signature with the order. A ten-dollar (\$10) handling fee is required on all orders; an additional ten-dollar (\$10) charge is required for non-U.S.A. orders.

Inquiries, orders, and payment should be addressed to: National Geophysical Data Center, NOAA, Code E/GC1, 325 Broadway, Boulder, CO 80303. Please direct telephone inquiries to (303) 497-6472.

#### COMPUTERIZED IMAGE CATALOG

A campus-wide network called the Digital Image Database Project at the University of California—Berkeley is being designed to catalog the university's visual materials. The project, still in its infancy, will eventually handle a million 1 MB digital images of maps, slides, paintings and rare manuscripts.

Because of its wealth of image resources, the Department of Geography has proved a worthy pilot site. It took programmers six months to develop the software for the Berkeley Coordinate-Based Geographic Catalog. They have developed a prototype data base concentrating on California's

Mono Lake Basin. It displays a wide range of library documents including Landsat images, maps, aerial photographs and landscape views.

There are many applications for the geographic catalog. Images obtained from the library can be manipulated and used to examine and illustrate historic, current and future geographic relationships. Such analyses are helpful in studies of water and fores t resources, land use planning, human impact on the environment, transportation and even tourism.

In addition, professors and students can locate and manipulate images on screen and save the digitized data on a disk without leaving the workstation. Ideally, they could then project the images for presentation.

(Computer Graphics Today, 1989)

#### WORLD BANK PUBLICATIONS

The following teaching resources are available from the World Bank:

§ The Development Data Book and Teaching Guide. Students use 16 pages of color maps, charts, tables, and text, to master five key statistical concepts in studying the developmental process: life expectancy at birth, primary school enrollment, population growth rate, GNP per capita and merchandise exports. The 52-page Teaching Guide contains up-to-date outline maps, comprehensive activities for varying aptitudes, reproducible worksheets for each chapter, and a test to measure achievement. Cost: \$9.95 (includes 11 student books and 1 teaching guide).

§ Measures of Progress Poster Kits. Two poster kits are now available: Life Expectancy at Birth (Poster Kit 1) and Population Growth Rate (Poster Kit 2). Each poster kit contains:

—a colorful poster map of the world

(24" x 36") with data on 148 countries, easy-to-read text, and three charts illustrating key concepts.

—six color photographs (8 1/2" x 11") that reveal the people behind the statistics, with texts that describe how these people are working to improve their lives.

—comprehensive teaching guide (16 or 20 pages) with a full range of activities or worksheets and a test to measure understanding of key concepts. Cost: \$5.95 each.

§Toward a Better World multimedia learning kits. Each learning kit contains: 36 student books and pamphlets, 1 or 2 sound filmstrips, and a comprehensive teaching guide with worksheets. Subjects include: The Developing World, The Rajasthan Canal Project, Small-Scale Industries in Kenya, Tackling Poverty in Indonesia's Cities. Cost: \$60 each.

Send orders to: World Bank Publications, Department 0552, Washington, DC 20073-0552. (NCGE Perspective, 6/89)

#### NEWBERRY ACQUIRES RAND MCNALLY COLLECTION

The Newberry Library in the fall of 1988 began to acquire Rand McNally's entire archive of its printed works-books, atlases, maps, guidebooks, and globesfrom the 1870's up to the 1980's. Current publications will be deposited regularly with the library in order to keep the collection up to date. The Rand Mc-Nally collections complement Newberry's special subject strengths: Chicago history, printing and publishing history, and the history of cartography. (Mapline 54, 6/89)

# "TERRA COGNITA" TELEVISION SERIES PLANNED Kevin Kaufman, a member of the History of Cartography project

headquartered at the University of Wisconsin—Madison, is researching and writing material for a television program called "The Mapping of America." Kaufman's script, covering the years 1492-1800, will be the first part of a television series on the history of cartography entitled "Terra Cognita" planned by LMcL Communications, Inc. Preliminary support for the project has come from the United States Geological Survey. (Mapline 54, 6/89)

#### new maps

UNITED STATES. Metropolitan statistical areas. (U.S. Maps GE-50, No. 88). Washington: Geography Division, Bureau of the Census, 1988. Scale 1:5,000,000.

OHIO. Water transportation map of Ohio. Columbus: Ohio Division of Water Transportation, 1988.

MISSOURI. Mineral resources and industrial map of Missouri. Jefferson City: Missouri Geological Survey, 1988. Scale 1:500,000.

NEBRASKA. Vegetative conditions in Nebraska viewed by satellite: 1987 growing season. (GRM-11). Lincoln: Center for Advanced Land Management Information Technologies, 1988. \$2.50 (CALMIT, Conservation and Survey Division, Institute of Agriculture of Agriculture and Natural Resources of Nebraska, Lincoln, NE 68588-0517).

WASHINGTON. Washington at statehood, 1889-1989: a map celebrating 100 years of progress and statehood. Ellensburg, WA: Department of Geography, Central Washington University Foundation, 1989. Scale 1:900,000. \$4.00 Webpco Printing, P.O. Box 2027, Wenatchee, WA 98801).

OREGON. An explorer's map of Oregon. Eugene: Exclusive Maps, 1988. Scale 1:1,000,000. \$5.95 (Exclusive Maps, 1430 Williamette, Suite 369, Eugene, Oregon 97401).

COLORADO. Topographic recreational map of Colorado. (Map R-1). Canon City: Western Geographics, 1989. Scale 1:7, 920,000. \$2.95 (Western Cartographics, P.O. Box 2204, Canon City, CO 81212).

NEW MEXICO. Water use in New Mexico, 1985. Albuquerque: New Mexico State Engineer Office, 1988. USGS Open-file Report 88-343.

ARIZONA. Geologic map of Arizona. (Map 26). Tucson: Arizona Geological Survey, 1988. Scale 1:1,000,000. \$6.75 (folded) and \$7.75 (rolled).

UTAH. Great Salt Lake and Newfoundland evaporation basin. Reston, VA: U.S. Geological Survey, 1987. Experimental ed. (satellite image map). Scale 1:250,000.

CALIFORNIA. Golden Gate Transit: bus and Ferry system map. San Francisco: Golden Gate Bridge, Highway and Transportation District, 1988. Free (Golden Gate Bridge, Highway and Transportation District, Box 9000, Presidio Station, San Francisco, CA 94129).

ALASKA. Seismicity map of Alaska, 1786-1987. Reston, VA: U.S. Geological Survey, 1989. Scale 1:2,500,000. SuDoc No. I 19.76: 89-88.

WEST INDIES. Map of modern reefs and sediments of Antigua, West Indies. DeKalb, Ill.: Department of Geology, Northern Illinois University, 1988. Scale 1:40,000. \$11 (Payable to NIU Geology Department; send to M.P. Weiss, Department of Geology, Northern Illinois University, DeKalb, IL 60115).

CHINA. Power industry in China. Hong Kong: Geocarto International Centre, 1988. Scale 1:8,000,000. \$30.

AUSTRALIA, N.S.W. Mineral deposits of New South Wales. Sydney: Department of Mineral Resources, 1988. Scale 1:1,500,000. \$3.00A.

#### NEW RAISZ MAPS

Kate Raisz, the new manager of Raisz Landform Maps, announced improvements in the reproduction and distribution of the classic maps drafted by her late grandfather, Erwin Raisz. The company has added a key of physiographic symbols to all maps and upgraded the paper stock on which the maps are printed to 60# vellum. The company also plans to reissue the 3-color maps of the United States and Canada in the near future. For a price list, contact: Raisz Landform Maps, P.O. Box 2254, Jamaica Plain, MA 02130. Phone: (617) 522-3901.

## new atlases

Associated Press World Atlas. Boulder, Co.: Graphic Learning International, 1989. 184 p. ISBN 0-87746-11-2. \$14.95.

Beck, Warren A. Historical Atlas of the American West. Norman: University of Oklahoma, 1989. ISBN 0-8061-2193-9. \$29.95.

Chengdu Institute of Geography (ed.). Atlas of the Ecology and Environment of the Yangtze River and the Three Gorges. Hong Kong: Geocarte International Centre, 1989. 200 p. incl. 100 maps.