

content to the needs of writer-scholars in the social sciences, Monmonier necessarily omitted certain topics that would be a standard part of a general purpose cartographic text. □

BOOK REVIEW

Map Use and Analysis (Second Edition)

John Campbell, Dubuque, Iowa: William C. Brown Publishers, 1993. xi, 429pp., 21.5 x 25.3 cm appendixes, glossary, index. US \$38.00. Paper ISBN 0-697-13579-9.

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Map Use and Analysis was prepared as an introductory textbook for map reading on the college or university level. This thorough and adeptly illustrated text reflects the author's many years of teaching experience in the field of cartography which he passes on to the reader in an exceedingly lucid manner. The very cover of this edition conveys a more dynamic, even exciting, image of cartography than the previous edition.

The 429-page text is divided into twenty-two chapters, seven appendixes and a twenty-two page extensive glossary of selected terms. In addition, there is an eleven page index. Each chapter ends with a summary and includes a bibliography with suggested readings. Over three hundred black-and-white figures are included. These maps, graphs, and illustrations were thoughtfully chosen and serve as excellent examples to clearly emphasize relevant points. The content is arranged in a coherent, well-ordered manner, and is not only

easy to follow, but provides the reader with a flow of conceptual material that facilitates mastery of the subject of cartography.

The first six chapters cover issues essential to map understanding, including why maps are useful and how maps are produced. The shape and size of the earth is outlined in Chapter Two. Chapter Three covers basic map projections and their appropriate use. Map scales and generalization are the subjects of Chapter Four. Chapter Five discusses measurement techniques. Route selection techniques and navigation on land, water and in the air are the focus of Chapter Six.

Three chapters (Seven, Eight, and Nine) provide fundamental instructions in surface and terrain representation including reading and understanding of contour maps. Chapter Ten presents a variety of locational and land ownership systems. Chapters Eleven and Twelve survey the characteristics of mapped distributions. Chapter Thirteen covers the general topic of thematic maps and how to interpret qualitative and quantitative information. Cartograms and map misuse are included in Chapter Fourteen. As Lindenberg points out in his review of this text (Lindenberg 1992), the placement of these two topics almost leads to guilt by association.

The last several chapters give an accounting of map types and graphs, mapping operations, and map producers. One entire chapter (Sixteen) is devoted to graphs, a topic often neglected in cartography textbooks. The chapters on remote sensing techniques, computer assisted cartography, and geographic information systems bring this book up-to-date with new cartographic technologies.

The final chapters of the book (Twenty-one and Twenty-two) are a compendium of the major

mapping agencies in the United States and Canada. A discussion is also included of some of the problems one can encounter using foreign maps. A valuable contribution in this edition is a new section on Canadian Government maps and their sources, including addresses for securing magnetic tape or diskettes about Canadian toponyms.

Anybody familiar with the first edition of *Map Use and Map Analysis* will enjoy this second edition even more. Some of the minor errors present in the first edition (see Loy 1992) have been corrected. Campbell has rearranged the Table of Contents to provide greater cohesiveness to the topics in the book.

One of the major strengths of this book is the integration of text and illustrations. The illustrations artfully supplement the text, an important advantage for students. The illustrations are of high quality and readable in spite of the fact that in many cases colored maps were reproduced in black and white.

After using the book in an introductory map use and analysis class, I found some students initially overwhelmed by the many technical terms and math formulas which are part of the text, especially in the theoretical presentations in chapters eleven and twelve. Classroom discussions were vital to put students at ease and to help them clarify the subject matter, however, the majority of students found the text very informative.

Map Use and Analysis is not only a textbook for classroom but it is a very practical resource for individuals who have an interest in mapping or cartography. For instance, you can find addresses of government agencies to write and order maps, and one of the appendixes provides sources for mapping programs and microcomputer databases. This is informa-

tion the novice map user may not be able to easily find. As a textbook, *Map Use and Analysis* achieves the purposes of its author and publisher by offering a comprehensive survey of the map world. I highly recommended it for introductory map reading courses as well as for the enjoyment of map aficionados.

References

Lindenberg, R. 1991. Review of *Map Use and Analysis*. *Cartographica*. 28 (1): 99-101.

Loy, W. 1992. Review of *Map Use and Analysis*. *Cartography and Geographic Information Systems*. 19 (1): 54-55. □

announcements

Curator of AGS Collection Retires

Roman Drazniowsky, Curator of the American Geographical Society Collection at the Golda Meir Library, University of Wisconsin - Milwaukee and Editor of *Current Geographical Publications*, retired July 1, 1993 after 31 years of service. Dr. Drazniowsky's association with the AGS Collection dates back to 1962, and he played a vital role in transferring the Society's library and map collections to UW-Milwaukee in 1978. A native of Ukraine, Drazniowsky holds a Ph.D. from Innsbruck University, and while in New York he taught cartography at Columbia University. An internationally recognized expert in the field of cartography, Drazniowsky received the American Geographical Society's Charles P. Daly Medal in 1978 and a Citation from the Special Library Association's Geography and Map

Division in 1979. Drazniowsky was one of the founding members of NACIS and he has been an honorary member of the Societe de Geographie (Paris) since 1982.

NGSD Presents New GIS/LIS Workshop for the Public

The National Geodetic Survey Division (NGSD) announces a new workshop available for presentation throughout the United States. "Developing an Accurate GIS/LIS" is a 1-day seminar describing the application, uses, and benefits of the National Geodetic Reference System (NGRS) as the foundation for creating an accurate Geographic Information System/Land Information System (GIS/LIS). Spatial data, by definition, requires reference to the NGRS. Topics for this workshop include essential geodetic concepts, defining horizontal and vertical coordinate systems, accuracy standards, surveying methods, and developing and maintaining the NGRS at the local level.

NGSD also conducts workshops on such topics as survey instrumentation and coordinate conversion, converting survey results from one geodetic datum to another, data reduction and analysis methods, calibration base lines for electronic distance measuring instruments, state plane coordinates, project planning and network adjustments, GPS techniques related to space coordinate and terrestrial coordinate relationships, survey mark preservation, and NGSD products and services.

These workshops are cooperative ventures involving the NGSD, the American Congress on Surveying and Mapping (ACSM), and other organizations, including universities. NGSD also develops new workshops upon request, provided it has the expertise and the resources necessary. Inquiries should be made to Mr. David Doyle, phone: (301) 713-3178.

Raster and Vector Electronic Chart Formats Developed

The Nautical Charting Division's Mapping and Charting Branch has begun the process of digitizing NOAA's nautical charts. This multiyear effort will result in both raster and vector-format nautical charts. Hardware and software to use electronic charts are presently being developed by private vendors. Draft performance standards for the Electronic Chart Display and Information System (ECDIS) have developed from the international effort. ECDIS combines digital nautical charts produced by NOAA, radar, and accurate vessel positioning using the Differential Global Positioning System (DGPS) on one computer screen.

ECDIS provides a real-time visual display of a vessel's position in relation to its environment. It also has an audible alarm to warn navigators when they are approaching hazardous navigation areas. After using ECDIS, mariners have stated that it reduces the amount of time spent on navigation and increases the amount of time available for collision avoidance. This combination of navigation and collision-avoidance equipment has been called the greatest advance in the safety of navigation since the invention of radar. Inquiries should be made to CDR George Leigh, phone: (301) 713-2779.

Coast and Geodetic Offices Move

The Coast and Geodetic Survey Offices have moved to new headquarters. Their new mailing address is:

**Coast and Geodetic Survey
N/CG**

**1315 East-West Highway
Room 8871**

**Silver Spring, Maryland
20910-3282**