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Book Review

Multimedia cartography by W. Cartwright, M. Peterson, and G. Gartner (Eds.). Springer-Verlag, Berlin, 1999, 343pp., US$ 59.00, ISBN 3-540-65818-1.

This book presents a good overview of the state of the art of multimedia cartography, a field of knowledge and application which is a natural evolution of computer mapping and GIS technologies. From the simple presentation of maps on CD-ROM to the distribution of dynamic interactive world map databases via the WWW, the history, theory and present experiences of multimedia maps are presented, together with some exciting prospects for future development. The editors have extensive experience in the field and have gathered a representative sample of up-to-date works, and, of particular importance in this field, give suggestions about where to find up-to-the-minute information on the Web.

The book will be useful to mapping and geoscience professionals, as well as to graduate and undergraduate students, all of whom may be involved in multimedia cartography for teaching, learning, technical, and even tourist applications. The chapters present a range of general and specialized information.

The book begins with a chapter by Cartwright and Peterson presenting a general overview of the field, defining its main terms and theoretical boundaries. This is followed by a history of multimedia by Cartwright. Chapters by Peterson and Dransch deal with the theory of multimedia cartography in depth and those by Miller, Ormeling and Borchert present theoretical and technological aspects involved in the design of multimedia maps and atlases.

The following chapters present the experience — illustrated by examples on the accompanying CD — acquired in making multimedia maps of Austria, Switzerland, Québec, Florida, Canada, Germany and the Native peoples of North America.

Specific technological issues are dealt with in chapters on design for the Web, animation, virtual reality, programming languages, and 3D visualization, with the ideas of online interaction and dynamic maps appearing in all chapters.

The opportunities for, and consequences of, multimedia cartography in applications and teaching in geography and the social sciences are covered in the later chapters.

The book closes with a discussion of future developments, and how multimedia cartography will be integrated into the current communication revolution; this leaves us wondering about what the future holds. Whatever it be, books like this will serve to keep us prepared.

The graphical quality of the book is good. The lack of color illustrations is somewhat disappointing, but is compensated for by the rich visual information on the accompanying CD.

Readers of Computers & Geosciences, predominantly geologists, may find that the book has a geographical and social science bias. I would like to have seen more geological examples, like the Geological Map of Europe, presented by Kraft at http://www.bgr.de/karten/IGME5000/igme5000.htm, which will be at the same time a paper atlas, a GIS, and a multimedia atlas. More examples of dynamic GIS applications and programs, such as inovaGIS (look at http://www.inovagis.org) would be helpful, as would some additional discussion of maps, such as dynamic tourist guides, for the nonspecialist user.

In conclusion, I strongly recommend this book to anyone interested in geoscientific computer applications. In time, we will all have to become familiar with multimedia cartography, as a natural extension of maps and GIS. Considering the amount and quality of information presented, the price of US$ 59.00 makes this book an excellent buy.

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