A Forward to Electronic Atlases: National and Regional Applications

A special session was organized on "Electronic Atlases: National and Regional Applications" at the 1994 ASPRS/ACSM Annual Convention in Reno, Nevada. The theme evolved from a previously successful joint seminar on "Atlas and Spatial Data in Electronic Formats of Presentation: Production, Use, Analysis, and Education" held in the spring of 1993 in Visegrád, Hungary. The 1993 seminar was sponsored by three Commissions of the International Cartographic Association (ICA): the Commission on Education and Training (CET); the Commission on National and Regional Atlases (CNRA); and the Commission on Map and Spatial Data Use (CMSDU).

The papers published in this issue of *Cartographic Perspectives* were presented at the Reno session. Dr. Bengt Rystedt from the National Land Survey of Sweden and Chairman of the CNRA moderated the atlas session. Dr. Rystedt led the presentations with his views on "Current Trends in Electronic Atlas Production." Automated atlas production techniques have been a continuing theme of the CNRA, and in his paper Dr. Rystedt emphasizes recent technological developments such as multimedia applications, a shift from workstation to PC hardware platforms, and improved user interfaces.

Professor Ferjan Ormeling from the University of Utrecht (and Co-Chair of the CET) discusses "New Forms, Concepts, and Structures for European National Atlases." Professor Ormeling reports on shifts to non-traditional forms of presentation and use. For example, he discusses the evolution of electronic atlases, recent CD-ROM media, and access of national atlases through on-line services. Readers are tempted to explore electronic atlas tools which have greater user participation.

The technical nature of these papers and the diversity of their utility to designers and producers of maps and atlases is timely.

Dr. Peter Keller from the University of Victoria introduces the transition from traditional to digital atlases and National Atlas Information Systems in his paper on "Visualizing Digital Atlas Information Products and the User Perspective." Dr. Keller observes that users want to perform more comparisons with data which previously had not been available in traditional atlases. He challenges atlas designers and producers to maximize the potential of new atlas forms and release themselves from the limitations of the traditional atlas. Dr. Keller warns of balancing conceptualization against user requirements and fiscal responsibility.

Dr. Ute Dymon from Kent State University discusses the notion of using electronic atlases for educational purposes. Her paper, "The Potential of Electronic Atlases for Geographic Education," explores the possibilities of using electronic atlases to develop higher order thinking skills.

Dr. Richard Smith and Mr. Thomas Parker from the University of Arkansas compare electronic atlas producers in terms of their mission, sales, and barriers to production in their paper "An Electronic Atlas Authoring System." They also provide guidance on creating an Atlas Authoring System based on their own experiences in this evolving technology.

Dr. Joel Morrison from the U.S. Geological Survey in his paper, "A Personalized National Atlas of the United States," conceptualizes a U.S. National Atlas Program. Dr. Morrison envisions a joint effort between government, industry, and academia. One notion is a National Atlas as a subset within the National Spatial Data Infrastructure (NSDI). Electronic atlas media suggests standards, maintenance, and network requirements. Dr. Morrison offers a sample of functional capabilities that enhance user interaction and applications.

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The technical nature of these papers and the diversity of their utility to designers and producers of maps and atlases is timely. Fast changing work environments beg for guidance on matters that ease transition and embrace the application and power of evolving technologies. The ICA Commission on National and Regional Atlases is pleased to have the opportunity to publish these resourceful articles in ***Cartographic Perspectives*** and we thank the Editorial Board of the North American Cartographic Information Society for their support in disseminating the CNRA's atlas perspectives.

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U.S. Representative to the ICA Commission on National and Regional Atlases

EDITOR'S NOTE

We are pleased to be able to present these papers from the 1994 ASPRS/ACSM Annual Conference special session on "Electronic Atlases: National and Regional Applications." The idea to publish this collection of articles in ***Cartographic Perspectives*** was proposed by Professor Ute Dymon of Kent State University. The editorial staff of ***Cartographic Perspectives*** is very appreciative of Professor Dymon's assistance in initiating this idea, soliciting the papers, and making certain that the authors met deadlines.

A number of papers on electronic and multimedia atlases have been presented at national and international geographic and cartographic conferences over the past few years. The result has been an increase in the research, interest, and development of such products. For many of us, our cartographic experiences and expertise lie in printed maps. Digital publishing of cartographic products requires that we take a fresh look at how we design and communicate geographic information and how we package these new map products.

It is important that our professional journals provide a forum for these ideas. In our last issue of ***Cartographic Perspectives*** (issue #19) we published five articles that related to the use of multimedia in cartography. The six articles in this current issue are organized around the specific theme of atlases. They represents just some of the ideas and concepts the cartographic community should address as we begin to make advances in digital atlas production. We hope this issue provides useful information and ideas that, in turn, promote further research and activity in this area.

Sona Karentz Andrews
Editor, ***Cartographic Perspectives*** ❑