from Mark Monmonier, a well-researched and readable account of an area of cartography that has not previously been well examined. This book will be an excellent addition to most libraries and the collections of both cartographers and meteorologists.

Barrington Atlas of the Greek and Roman World.

Richard J.A. Talbert, ed. Princeton, NJ: Princeton University Press, 2000. xxviii pages, 102 plates, [] pages. ISBN 0-691-03169-X; \$325.00. Two-volume *Map-by-Map Directory* (ISBN 0-691-04962-9) \$150.00

Reviewed by Jenny Marie Johnson Map and Geography Librarian University of Illinois

The publication of the *Barrington* Atlas of the Greek and Roman World is an event that has been awaited by classical scholars for over one hundred years. Only one other publication has attempted to comprehensively display the physical landscape of the Greek and Roman world, Atlas of Ancient Geography Biblical and Classical by William Smith published between 1872 and 1874.1 In 1980, members of the American Philological Association (APA) realized that projects then underway were not going to successfully meet the need for basic reference maps supporting classical studies and that older materials were becoming increasingly less accessible. In 1988, after little further forward movement by the APA, Richard Talbert was asked to take on the task of providing the focus and driving force to successfully compile and complete the publication of a reference atlas. Talbert set five goals for the project: to involve the cartography firm and publisher early in development process; to develop plans that

could be completed in the foreseeable future at a reasonable cost; to create a single, bound atlas ample in size but not unwieldy; to comprehensively cover depictions of ancient landscape configurations; and to create maps that could be used by readers not necessarily well versed in map interpretation. Donnelly Cartographic Services (later Geosystems and MapQuest. com, Inc.) and the Princeton University Press were involved early to establish the format and style of the atlas. In 1990 a specimen map prepared by Donnelly Cartographic Services, which became the "Byzantium" map in the atlas, received the "American Congress on Surveying and Mapping Certificate of Merit, 1990 Map Design Competition, Best of Category: Series Maps and Charts." Setting a goal of foreseeable completion in combination the goals for comprehensiveness and a single-volume accessible atlas drove design and coverage. Maps were prepared that follow a common format with a unifying symbol style, method of elevation depiction, and a minimum of different scales.

More than 200 individuals were involved in the preparation of the atlas, preparing base maps, compiling data, reviewing maps and directory entries, and editing. Base maps were developed from standard United States Defense Mapping Agency/National Imagery and Mapping Agency products, Joint Operations Graphics, Tactical Pilotage Charts, Operational Navigation Charts and Global Navigation Charts. Compilers were specialists already well acquainted with the regions that they were asked to cover; compilers were to use existing sources, not to become involved in new, extensive research efforts. Each of the plates includes attribution to its compilers, as none of the work in the atlas is anonymous or done by the collective, and the date that it was submitted to the project

by the compiler. The maps were anonymously reviewed by classical scholars who were not otherwise connected with the project. Funding for the project, more than \$4.5 million, came from a number of different sources including the Barrington Foundation, the American Philological Association, the National Endowment for the Humanities, and the University of North Carolina, Chapel Hill.

"The purpose of each map is to offer an up-to-date presentation of the significant physical and cultural features of the area covered. within the relevant time frame, exploiting all available historical, epigraphic, and archaeological data." The Barrington could well be the Times World Atlas for the Greek and Roman world. The volume includes 99 topographic maps on 175 pages plus three additional overview "sketches." There is an extensive amount of introductory material that places the atlas into an intellectual context, describes how the atlas was prepared, and assists the user in making the best use of the maps. A 44-page gazetteer section containing 24,249 feature names found on the maps, including multiple names for some features, concludes the volume.

The maps are at four different scales, 1:5,000,000, 1:1,000,000, 1:500,000 and 1:150,000. Most of the maps are double-page plates. Relief is shown by gradient tints and, depending on scale, shading or contours. The smallest scale is used for the seven regional "overview maps" that open the map portion of the atlas. The areas covered by the overview maps are large regions, some of which had contact with the Greeks and Romans but were not strictly part of the Greek or Roman worlds: Mare Internum, Fortunatae Insulae, Hibernia-Scandinavia, Asia Occidentalis, Arabia-Azania, India with Sri Lanka, Asia Orientalis. Six geographical sections follow: Europa Septentrionalis, HispaniaLibya, Italia, Graecia-Asia Minor, Syria-Meroe, and Pontus Euxinus-Persicus Sinus-Bactria. The maps in these sections are at either 1:500,000 or 1:1,000,000; the larger scale is used for maps of the "core" classical world while the smaller is used for maps of the peripheral classical world. Three maps in the six geographical sections, Attica, Rome and vicinity, and the Bosphorus, are at 1:150,000. The final three maps, the overview "sketches," show the provinces of the Roman Empire at three specific times, the death of Trajan (A.D. 117), from the Verona List (circa A.D. 303-324) and according to Hierocles (late 5th century to early 6th century, A.D.). These three maps are the only maps in the entire volume with a specifically assigned time period. All of the other maps show a variety of overlapping time periods by using color coding of the feature name or by underlining the feature name.

The Barrington Atlas is not the typical "textbook" classical history atlas that includes coverage of physical, political, economic, cultural, military, and religious features or events. The focus of the Barrington Atlas is strictly the physical (topographical) world as it probably appeared during the classical period much in the same way that the Times Atlas of the World focuses on the physical aspects of today's world.

The *Barrington Atlas* is a solid volume. Its binding is scholarly in appearance and sturdy enough to stand up to years of use. The pages lay flat when opened and little, if any, information will be lost to the gutter on double-page maps. The color scheme used for the gradient tints is similar to the Times Atlas of the World, but not as saturated, with a traditional progression from green at lower elevations through yellow to rosy browns at higher elevations. Contour lines are light gray allowing feature names to "float" above the landscape

for easy reading. There is a nice control of foreground and background. All maps include a ratio scale statement plus a barscale. The maps do not feel cluttered, and it should be easy for novice map users to find the specific sites they seek. The symbol key appears only once in the volume, at the beginning of the map section on the verso of the fold-out map of the Mediterranean Sea. The extra thickness of the folded page makes is easier to find the legend than it would be on a single thickness of paper. The introductory material is clearly presented and includes some interesting information normally not found in atlases, a description of the compilation and production process plus a mapby-map listing of base maps used. Much of the introductory material should be required reading for first-time atlas users; it places the atlas in both an intellectual and historical context and alerts the reader to some of the constraints placed on the atlas and its contributors.

The atlas is accompanied by a "Map-by-Map Directory" CD-ROM. Each map has a section that includes introductory material, a listing of all of the place names on the map with codes for the source material used by the compiler, and a bibliography. The introductory material provides a geographical overview of the area covered by the map and will include discussions of problems encountered and decisions made during compilation. The place name list displays grid location, feature names including variants, period of occupation, modern name, and appropriate supporting reference works. Adobe Acrobat Reader 4.0 with Search, version 4.05 is included on the CD and is required to not only view the files but to make full search capability use of the indexed files. The basic version of Adobe Acrobat 4.0 will open files for viewing but is not

able to search across files. Instructions on using the "Map-by-Map Directory" are also included on the CD. The navigation between files is facilitated by a PDF file of the table of contents with links to the individual chapters, working much in the same way as a paper index with hand-turned pages. The "Map-by-Map Directory" is a necessary supplement to the atlas because it includes the names of features that are given only reference numbers on the maps. Alternatively, the same information can be viewed in the separately available two-volume printed version of the directory. The PDF files on the CD-ROM duplicate exactly the pages of the printed volumes except for some errors in an abbreviations list which are acknowledged in the FAQ at the Ancient World Mapping Center web site and were corrected between the production of the CD-ROM and the printed directory.

Hammond's *Atlas of the Greek* and Roman World in Antiquity² is the atlas most similar to the Barrington because it includes maps that focus on the physical/political world in addition to maps that target specific events, time periods, or activities. The Hammond indexes more than 10,000 sites, slightly less than half of the number included in the *Barrington*. It includes maps of wars and battles, cities, trade and invasion routes, and the spread of Christianity, none of which can be found in the Barrington. The Hammond includes little explanatory text, and all of the maps are in shades of brown. This contrasts greatly with the extensive introductory material at the beginning of the *Barrington*, the explanations that accompany each map in the map-by-map directory, and the chromatic range of the gradient tints on the Barrington's maps.

There are two textbook atlases titled *Atlas of the Classical World*, one edited by Talbert³ and the

other by Michael Grant.4 Neither one has Barrington's dedicated focus on classical landforms and extensive feature names. Although both have gazetteer sections, their focus is on specific places, events, historical figures and time periods not on the topography and, indirectly, the connections made possible or hindered by topography. Because the Barrington Atlas does not include many maps targeted on specific figures or time periods, the novice classical scholar may be best served by using the Barrington side-by-side with one of the more common textbook atlases, and seasoned scholars will enjoy the security of the robust scholarship that underlies the entire volume.

Work on the atlas continues with communication via the Web. The Ancient World Mapping Center has been established at the University of North Carolina at Chapel Hill "to promote cartography and geographic information science as essential disciplines within the field of ancient studies." The website (http://www. unc.edu/depts/awmc/) includes a FAQ for the atlas and soon will make available a Web form for critiques and corrections to the atlas. There are also a number of links to classic world-related sites and maps derived from the Barrington Atlas which can be downloaded in PDF format. The Barrington Atlas of the Greek and Roman World will not become stale or dated as long as the Ancient World Mapping Center exists.

Although expensive, the Barrington Atlas of the Greek and Roman World should be considered an essential purchase for libraries supporting classical studies programs. Devoted classical scholars with room in their personal libraries for a large volume may also want to have this instant classic readily at hand. The additional purchase of print "Map-by-Map Directory" is not strictly necessary as the CD-ROM version is bundled with the

atlas but the print may facilitate more in depth study, especially where computing equipment is not easily accessible. The atlas will appeal to novice and senior scholars but also might find a fringe audience of novelists and poets who are looking for place names rooted in history but with an ambiance of timelessness.

Richard J.A. Talbert, "Mapping the Classical World: Major Atlases and Map Series 1872-1990," Journal of Roman Archaeology 5 (1992): 5-38.

Nicholas G.L. Hammond, ed. *Atlas* of the Greek and Roman World in Antiquity, Park Ridge, NJ: Noyes Press, 1981.

Richard J.A. Talbert, ed. *Atlas of Classical History*, New York: Macmillan, 1985.

Michael Grant. *Atlas of Classical History*, 5th ed. New York: Oxford University Press, 1994.

nacis news

CARTOGRAPHIC USERS ADVISORY COUNCIL (CUAC) 2000 MEETING AGENDA MAY 4 & 5, 2000 NOAA SILVER SPRING, MARYLAND

CUAC representatives in attendance:

Janet Collins, Western Washington University (WAML) Donna Koepp, University of Kansas (GODORT) Clara McLeod, Washington University (GIS) Dan Seldin, Indiana University (NACIS) Richard Spohn, University of Cincinnati (GIS) Paul Stout, Ball State University (NACIS) Christopher JJ Thiry, Colorado School of Mines (WAML) Mark Thomas, Duke University (MAGERT)

Presenters:

Robin Haun-Mohamed (GPO)
Vi Moorhouse (Map cataloger at the GPO)
Fred Anderson and Howard Danley (NOAA)
John Hebert (Chief of LC G&M)
Jim Lusby (NIMA)
Robert Marx and Tim Trainor (Census)
Rea Mueller (USGS)
Betsy Banas (USFS)
Tom Patterson (NPS)

Government Printing Office (GPO)

Robin Haun-Mohamed of the Government Printing Office (GPO) told the Council that GPO will distribute 28.2 million items in Fiscal Year 2000. GPO distributed 382,000 maps in FY 1999. GPO is entering its fifth year of transition from paper to electronic items. The