(Fugitive Cartographic Literature continued from page 14)

in display design is unlikely. Further, the piece reads as if it were heavily but quickly edited, leaving a number of awkward and confusing passages. Judging by the quality of driver interfaces I have seen in Toyota vehicles in the last several years, I suspect that the authors are holding their best material for a different market.

Matthews, Victor and James Moyer (1990). Bible atlases: which ones are best? *Biblical Archaeologist*, December 1990, pp. 220-231.

The article provides a survey of ten bible atlases published in the 1980s. The atlases are divided into two classes: student bible atlases and reference bible atlases. These atlases are reviewed according to the following criteria: visually attractive maps that accurately and easily show the locations of all places mentioned in the Bible, gazetteer, accurate information about the geography, topography, and climate, clear pictures and illustrations with informative captions, up-to-date information that reflects the most recent archaeological discoveries. The two atlases selected as the best are The Moody Atlas of the Bible Lands and the New Bible Atlas by Tyndale.

cartographic artifacts

BOOK REVIEW

Campbell, John (1991) Map Use and Analysis. Dubuque, IA: William C. Brown. 418 pp. Reviewed by Joseph Stoll, The University of Akron

John Campbell prefaces his book Map Use and Analysis by stating that its aim is to "serve as an introduction to the fascinating world of maps with an emphasis on clarity of explanation" and assumes that its audience "has no specific prior knowledge of the topic." After thus explaining the purpose and general nature of the book, Campbell proceeds to cover a broad range of map-related topics over the space of twentytwo chapters. These topics include map projections, scale and generalization concepts, locational and land-partitioning systems, characteristics of map features, route selection and navigation, qualitative and quantitative information, remote sensing, computer-assisted cartography, special purpose maps, graphs, and map producers and information sources.

Campbell has produced a volume that deserves high marks for attractiveness, readability and scope. The appearance is clean and well-balanced. Figures are generally crisp and support the text well though the lack of color is noticeable. The somber black, white and gray tones are relieved only by the horizontal red stripes on the cover. The use of color in figures would increase the visual impact and help avoid the problem that occurs in Figure 12.1 where gray and black lines look nearly equally "black". The chapters are well organized, each beginning with a concise statement of its contents and concluding with a detailed summary. In this reviewer's opinion, the uninitiated reader on the subject of map use could justify the purchase of this volume — if only to read the summaries of the chapters.

Campbell inserts "sidebars" in this volume on the following subjects: The Analemma, Dates and Times, Units of Measurement, National Map Accuracy Standards, Levels of Measurement and Names on Maps. These inserts are visually set apart from the main body of text and provide the reader with explanations of details from the main text much like an inset provides an enlargement of an area on a map. Campbell's use of these sidebars adds interest both visually and intellectually.

Topics covered by Campbell relate to map users in a broad, comprehensive manner. Users of large and small scale maps will find material relevant to their applications. It is refreshing to see unique and less obvious (yet important) topics addressed such as charts, graphs and copyright laws. How many authors on the subject of cartography specifically address the design, application and interdependence of charts and graphs with maps? Regarding copyright law, informing the map user that avoiding penalties for copyright violations requires "scrupulously avoiding making unauthorized copies" (including single photocopies, or copies of copies with no visible copyright identification), leaves little room for misinterpretation.

Of special interest to me are chapters 16 and 17 which cover "Computer-Assisted Cartography" and "Digital Geographic Information Systems." These chapters are quite brief, yet they do address many important aspects in an understandable if general manner. Items addressed in these chapters include implementation of computer-assisted techniques, data capture, output, applications of computer-assisted techniques, data-base availability (including a good summary of United States Geological Survey and Census Bureau products), Digital Geographic Information System components, data forms, manipulation and analysis techniques and applications of Digital Geographic Information Systems. Related to the information contained in these chapters is Appendix C: "Sources of Mapping Programs and Data Bases for Microcomputers." Taken together, these chapters and the appendix comprise an excellent multifaceted introduction to the most recent trends in automated cartography. Having said this, it should be noted, however, that the chapter on computer-assisted cartography does not mention the use of the computer in map design, nor recent trends in capabilities of presentation graphics software. Since the focus of this book is on map use rather than map production, this does not constitute a glaring omission.

Contained in this volume is an excellent glossary of selected terms which includes several of the acronyms that have invaded our vocabulary during recent years. Examples of these are: TIGER, SPOT Image Corporation (who knew what the acronym SPOT was derived from?), NAVSTAR Global Positioning System and GNIS.

In summary, Map Use and Analysis is a readable and current overview of the "world of maps." This reviewer concludes that the aim of introducing this subject with clarity is accomplished and this volume should be a welcome addition to the library of anyone who is at least casually interested in maps.

AN ELUSIVE REFERENCE: THE 1:1 MAP STORY Jeremy Crampton, Penn State University

... in that empire, the art of cartography reached such perfection that the map of one Province alone took up a whole city, and the map of the Empire which had the size of the Empire itself and coincided with it point by point ...

Like many cartographers, I have heard of the "story of the ungeneralized map," i.e., a map that had a scale of exactly one-to-one, so large it covered the entire country. An interesting anecdote that might be worth investigating.

Some versions of the story say it was abandoned, and all that was left are a few rotting remains in the deserts. A similar version comes from Lewis Carroll's Sylvie and Bruno Concluded, a minor proselytizing work for children, in which a map's scale is increased until they get a one-to-one map; "but the farmers objected, saying it would block out the sunlight." No rotting maps in the deserts, but perhaps the telling of the quote had distorted it. Muehrcke's Map Interpretation includes this version.

For quite a long time I thought this was, in fact, the story. Then, two years ago, I was reading a little book by the French avantegarde cum post-modernist Jean Baudrillard called Simulations. Baudrillard begins by recounting "the Borges tale where the cartographers of the Empire draw up a map so detailed that it ends up exactly covering the territory. . . but where the decline of the Empire sees this map become fraved and finally ruined, a few shreds still discernible in the deserts . . . " (p. 1). This sounded more like it - Borges and not Carroll. But where? No reference is given by Baudrillard, but readily found, surely. Thus did I enter the labyrinth (a favorite metaphor of Borges). There can be few authors whose work is more obscurely scattered, more fleetingly published in the original, than Jorge Luis Borges. Searches through his collections like Ficciones were to no avail.

Less addicted to the study of cartography, succeeding generations understood that this widespread map was useless and not without impiety they abandoned it to the inclemencies of the sun and winters . . .

Then, in *Cartographica*, 26, p. 116, D.R.F. Taylor used the quote and confirms that it is by Borges, despite a citation in a 17th century book called *Viajes de Varones Prudents* by Suarez Miranda. Perhaps Borges was quoting from

this book? No; there is no "Miranda" book; Borges had made it up. I could not track it further, and continuing perusal of Borges' work itself was still fruitless. Although I now had the exact quote I had again come to a dead end.

Around this time I heard that a geographer at SUNY Binghampton, Matthew Edney, had coincidentally also searched for this story. From him I learned it was published in a book called Dreamtigers (originally El Hacedor, "The Maker"). So to the library. Such a book was listed, and was not checked out! Again, the solution seemed to be at hand. I went to get the book. It was not on the shelves. I checked the availability again; it was not checked out. The book was just missing, stolen perhaps. Not only that; but ditto for the original Spanish version. I began to entertain notions of a conspiracy.

There followed another Borgeslike twist. I had mentioned my search to Peter Gould at a pre-semester function over wine and cheese. He had heard of the story but couldn't say where. The next day I saw him at the library. The previous night, he had been reading a French cartography book by Sylvie Rimbert (Carto-Graphies, see his review in CP7) and found the same quote provided by Taylor that I had been telling him about a few hours previously. We were both amazed at the coincidence. I checked the library again, and noticed that another copy of Dreamtigers was kept in the Rare Book Room. I put my order in, and sat there with a friend, expecting that the exact page we wanted would have been carefully removed from the book, or that the librarian would come back with a puzzled expression on his face saying that the book could not be found, he was very sorry . . .

But the book did indeed arrive, signed by Borges himself. After