not be appropriate. This book is heavily focused on surfaces, cartographic background, which may not be suitable for many desktop GIS users. However, I don’t think Chrisman intended it for the masses of GIS users. It is a wonderful book for someone involved with GIS, or intends on learning more about geographic information.

The author has a web site encouraging continued exploration. The web site is http://www.wiley.com/college/chrisman. It is a great site full of content. It includes the book’s table of contents, a definition of GIS, the book’s index, and more.

Overall Chrisman meets his goal of starting the reader on an exploration of GIS. Very good examples are given as well as problems to look for during the implementation and technical phases of a GIS. In addition, he makes connection from GIS to other fields, or past processes to help the user understand a concept. Some examples of how he does this are provided here. A simple example, a reminder is given to the reader regarding “standardizing” a ranking from say 1 to 9. An assignment of numbers, Chrisman reminds the reader, does not automatically construct valid arithmetical relationships. Pitfalls with digitizing are highlighted. For example, taking the digitizing tablet’s resolution as a measure of accuracy. Projections and classification reductions are other examples Chrisman uses to get the reader on this exploration. Many links are made to other technologies, or just older methods of doing the same thing. Such as the overlay method taken from photomechanical reproduction, seeing through multiple layers. In addition to uses and specific technological tools, the author also gave specific examples from real-world projects such as the Pennsylvania project to site a disposal for radioactive waste. He used this project in the example of overlay. Other operations are detailed, such as raster overlays to get a cost surface. A good example is given in the transformation section of the book. Chrisman explains the process of Dasymetric mapping of population density. Showing population density after taking out uninhabited areas from the predefined set boundaries, in this case the census tracts also called controlled guesswork. The importance of a good cultural context is explained with the backdrop of systems that chose the hardware and software on technical merit, not the purpose of the organization.

I think current “power” users of GIS will learn interesting details and further their understanding of GIS. One of Chrisman’s underlying goals, I believe, is to have the reader question some of the data or processes currently in place in a GIS department.


"Shapes of Ireland: maps and their makers, 1564-1839", by J. H. Andrews, successfully presents and evaluates the cartographic impacts of the mapping history of Ireland. The early cartographic styles, with both their shortcomings and genius, juxtapose with the territorial and political struggles of the lands of Ireland and Britain that differ culturally and socially. Ireland owes most of its cartographic representation to English mappers, many never having set foot on its green and hilly shore. The story is poignant and true and told with erudition. It is only by reading between the lines that one sees the reasons for its late-blooming cartographic production. From present day evidence, most of Irish carto-
The last stage of conquest of Ireland, this is attributed to objective of English/Irish mapmaking during this tumultuous time of the union of Ireland and Great Britain. Andrews relates the details of fieldwork, compilation, production, and distribution of the nine key maps of Mercator, Boazio, Speed, Petty, Pratt, Jeffreys, Beaufort, Arrowsmith, and Larcom. The genealogical history is traced with specificity of what is currently known. The characteristics of the cartographer and the maps themselves are closely examined. Examples of the salient contributions to this cartographic history are shown and described. The maps are viewed as specimens of cartography, not as examples of iconography, propaganda, or art. They are examined by Andrews to the scholarly standards of the present day. As a further disclaimer, the manuscript map is silenced out, preempted by the printed map, which, according to Andrews, has more intrinsic precedence through his identification of merit and influence as determiners of successful historic mapping. He evaluates such criteria as legibility, comprehensiveness, aesthetic appeal, relationship to other maps, and its inherent noteworthiness as a means to identify merit. To assess the range of influence, Andrews specifies the derivations of the map, and its use. Using this as a guideline, he concludes that the printed map complies with more of the characteristics of merit and influence than the manuscript map, bringing the early phase of Irish mapping to about 1590. As mapping history progresses, Andrews carries onward the importance of the maps derived rather than the those which are the cause. The key maps he identifies throughout the text are evaluated for the degree of new information brought forth from them. It is the key map that is the foundation map, the cause, giving rise to the derivative map, the effect. In the ultimate effort to map Ireland, it is now the derivative map that is most complete and useful and representative of accuracy. How accurate it was assessed at the time is unsure, for those in the map workshop were often not those who had done the fieldwork. He nevertheless acknowledges the place of new mistakes on new maps, 'that the cartographer only tells the truth as he sees it,' and that reputations already won often contributed to the recognition of a map. We have the evidence of its size and relative detail upon it. Occasionally, we have the documented explanations of cartographic procedures described by the mapper himself. Often the cartographic influence itself was illusory, a place across the rough sea described and mapped by a colonizer safely at home in London. Having said all this, he defines the 16th century as marking the take-off period of map accuracy. The period reviewed by Andrews falls within this prescribed time. We can therefore be relatively certain that his examples are the definitive maps congruent with the mapping history of Ireland.

Following the 'later is best' theory, Andrews traces the cartographic representation of Ireland to the 20th century. Along the way, he reviews the progress of the Ordnance Survey, including the eventual need for the O.S. to seek the advice of commercial cartographer John Bartholomew of Edinburgh in the 1890s. Contending with the complexities of color, relief, and scale, the Ordnance Survey was pressured by both the military occupations of late-Victorian imperialism and increased tourism following the famine of the 1840s. Commercial competition forced the Survey to bring their work up to date in keeping with the technologies of the day. The non-geographical concerns such as color schemes, decoration, marginal text-matter, or specialized thematic
make the maps. Those who inhabit this land may have less interest in the story. The conquered not only have less voice, but perhaps less interest in the conquered land, as they struggle for their daily needs. Remembering it was for militarism and tourism, following the Irish famine that maps reached a zenith of popularity. The cartographic history here is seemingly as complete as it could be, short of a wonderful discovery that would fill in some early gaps. It probably would be Andrews himself who would be the scholarly discoverer of such missing links in the map history of Ireland. I wish him well, that he never completely closes the book on his research in this most interesting area.

The descriptive statistical data provided for each county includes both 1990 and 1995 population, population density (1995), and land and water area in square miles. Brief descriptions of the county's location and name origin are also given.

The book has limited utility since all of this information it contains can be found in other sources. The 1990 population, population density, land and water area in square miles, and the brief descriptions of the county's location and name origin is the same as what can be found in American Places Dictionary (Omnigraphics, Inc., 1994). The 1996 County and City Extra: Annual Metro, City and County Data Book (Bernan Press, 1996) is a much more comprehensive source for statistical data.


The most disturbing thing about Counties USA 1997 is the large number of errors evident in the land in square miles data. A possible printing or data entry problem caused all counties with land or water areas of four or more digits to be incorrect. For example, the land area for Bayfield County, Wisconsin is listed as 1 square mile! In reality it is 1,476 square miles. This problem results in an unacceptable number of errors of fact throughout the book. In western states such as Wyoming, where all counties have land areas greater than 1,000 square miles, the number listed for the area in square miles is always wrong. Because all of the information in Counties USA 1997 is found in other sources and the many obvious errors, it is difficult to recommend its purchase to any individual or institution.