

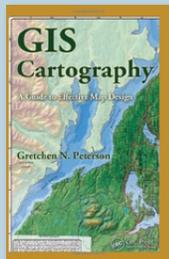
on topics across the natural sciences (see his feature on the Alpine maps and watercolors of Swiss geologist Hans Conrad Escher von der Linth in *Cabinet* 27, Fall 2007). Paglen was named one of the “50 visionaries who are changing your world” by *Utne Reader* in 2009 for his project to expose the geographies of the military-industrial complex on earth and in the sky. Some of the artists of the exhibition continue to map, when relevant to their activism.

What will happen next? I hope that some experimental geographers become more interested in geography, but I also hope that experimental geography can serve as both reminder and revitalization for those cartographers who have lost their sense of the political and social responsibilities which their talents carry with them. Spending some time with this book might do just that.

## Notes

1. For the differences between these techniques and experimental mapping in geography, see Denis Wood’s “Lynch Debord,” presented at the Association of American Geographers annual meeting in 2007, available online at: [http://krygier.owu.edu/krygier\\_html/geog\\_222/geog\\_222\\_lo/Lynch\\_Debord\\_Carto.45.3.003.pdf](http://krygier.owu.edu/krygier_html/geog_222/geog_222_lo/Lynch_Debord_Carto.45.3.003.pdf)

## GIS CARTOGRAPHY: A GUIDE TO EFFECTIVE MAP DESIGN



By Gretchen N. Peterson.

Boca Raton, Florida: CRC Press, 2009. 246 pages, color illustrations, index. \$89.95, hardcover.

ISBN: 978-1420082135

**Review by:** Ian Muehlenhaus, University of Wisconsin-La Crosse

Finally, here is the book that has been missing in GIS classrooms and work cubicles. Even more excitingly, it is written in layperson’s English for professionals and non-academics. Do not let its title, *GIS Cartography*, fool you. This is not a GIS book. It is a cartographic design book written by and for users of GIS who do not have the time, interest, or experience to read scientific treatises on cartography. There are some who will say that this book represents a terrible development. Surely, a cartographic text that completely ignores any discussion of projections, generalization, and thematic symbolization is anathema to the role of academic cartography within the GIS profession. However, for the horde of us that regularly attempt to interpret cognitively indecipherable maps coming out of GIS labs on a regular

basis, the publication of this text offers light at the end of the tunnel—assuming GIS users read it. In this reviewer’s opinion, read it they should.

The premise framing the text is straightforward. A practicing “GISer” (as the author refers to herself and others in the GIS profession) realizes she is making abstruse and unattractive maps. Over the years, she begins experimenting, reading, and testing different design methods. She creates a catalog of techniques that work very effectively in different situations with different clients, as well as a list of methods and layout designs that should never be used again. She writes a book with the intent of helping GISers design better maps. Not only does she write a very engaging and—shock, horror—humorous text, but she presents her content in a manner that allows the book to double as a quick reference guide for anyone struggling with map layout or design.

The purpose of the book is not to be a comprehensive compendium on cartography, but a resource to help GIS users become better at map design through experiential learning. Thus, unlike several other books on the market that deal with only a single company’s GIS software, this book is software neutral. The book is about designing effective maps regardless of whether you are using an antiquated drawing program or the newest GIS. The applications and methodological chicanery you use to achieve effective design is up to you. This book presents a potpourri of cartographic ends and lets you figure out the cartographic means. This seems a remarkably simple idea for a map design book, a concept that one would think would have been done 100 times already; yet, to the best of this reader’s knowledge, Gretchen Peterson is the first to pull it off so successfully.

The layout of the book is extremely effective. It is one of the most readable and useful cartography texts I have ever come across. The book is split into seven succinct chapters, five of which deal with specific topics in map design, including: layout, font use, color selection, feature representation, and designing for different media. The chapters themselves are divided into very compact subsections dealing with a particular element of the chapter topic. A majority of the subsections are of two paragraphs’ length or shorter. Nearly all are accompanied by visual examples of what they are explaining. In fact, the book is a visual cornucopia, providing high-quality, color examples throughout.

On top of being full of useful and well organized content, the production quality of this book also needs to be lauded. I first became interested in reading this book while perusing a black-and-white proof at a geography conference. Even before realizing the book had color, I thought the content was likely worth the book’s cost. I had no idea just how superb the production quality would be. The paper is of high stock and satin quality. Vibrantly colored graphs, charts, palettes, and maps litter

most of the book's pages. There are some great examples of why one should be wary of simultaneous contrast, and samples as well of color combinations that work. In the feature representation chapter, each subsection has a palette of hues that are of particular use for representing the features being discussed. The back of the book has several pages of color swatches (with accompanying RGB codes) that the author argues are effective when used together on maps. The book's typeface and subheadings are also very well chosen.

The chapter and appendix on layout design are some of the most extensive texts on this topic to be found anywhere. This chapter is broken down into subsections based on the map element being discussed. Best practices, different styling techniques, and placement tips are systematically reviewed for every type of map element one can think of. The chapters on text and color are far more brief, but still prove suitably detailed. The text chapter has several charts illustrating how to determine the ideal text size for your map based on how far away the reader will be – something handy to know when creating poster maps. The chapter on preparing maps for different mediums also adds a variety of useful information on how to embed and produce your maps in different situations.

Some sections of the book, however, are less stellar: the first two chapters, though short, are largely filler. The second chapter, entitled "Creative Inspiration," I found particularly aggravating. It read like a 12-step program for uninspired GIS professionals. Of course, if you are having trouble finding cartographic inspiration and need a jump start to fuel your design prowess, then this chapter might work for you, as it has sections called "You Can be Creative" and "An Example of How to See." Fortunately, although it is divided into seven sections, the entire chapter spans only six pages and thus, in some ways, better represents the art of concision than of creative induction.

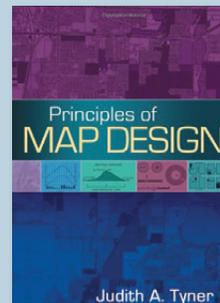
The book suffers from a lack of academic formalism. For example, many citations come from magazines such as *ArcUser* and *Government Technology*. Also, I discovered several faux pas in this book that might make trained cartographers cringe. For example, one of the first graphics I found when opening the book was an unprojected map of Minnesota (p. 142). There are a handful of such maps sprinkled throughout the volume. Given that such cartographic errors are common in many GIS textbooks, this by itself is not a reason to avoid the book. It may explain, though, why there is no chapter on map projections.

Due to its emphasis on design alone, at the expense of other fundamental aspects of cartography, I believe this book is most suitable as a secondary text on map design for introductory GIS courses. It is simply not substantial enough to serve as a primary text. I have already recommended *GIS Cartography* to former GIS students

as something to look at before they head out into the world making maps on their own. The book's layout and lush illustrations make it a superb reference book to have handy. Even as an experienced cartographer, the book gave me ideas for future map projects.

This is the book that many practitioners of GIS have been waiting a long time to get their hands on. *GIS Cartography* is one of the most enjoyable books on cartographic design I have ever read. The author has a great voice throughout the book and a sense of humor that keeps the writing fresh. The book is concise, full of examples, and makes for a perfect quick reference book. Perhaps most usefully to those practicing GIS or learning in a classroom, it was not written by some staid academic who has not designed a map in the past 10 years. Rather, the book has the vibrancy and enthusiasm of someone who is knowledgeable about the demands of modern GIS workplaces, and realistic about the technology available to the average user. This energy is more than enough to help the book overcome its few, forgivable shortcomings.

## PRINCIPLES OF MAP DESIGN



By Judith A. Tyner.

New York City: The Guilford Press, 2010. 259 pages, 197 black and white illustrations, 23 color plates, 3 appendices, bibliography, index. \$60.00, hardcover.

ISBN: 978-1606235447

### Review by: Dan Cole

In her Preface, the author unpretentiously, yet proudly discusses how she wrote an earlier version of this book in 1992, and observes how map design has remained consistently steadfast in spite of changes in technology. Her new book contains 12 chapters grouped into 5 parts, plus 3 appendices, a bibliography, and an index. At the end of every chapter are suggestions for further reading. These suggestions, combined with the bibliography, provide students and other readers with plenty of resources to pursue additional information.

In the first chapter, "Introduction," Tyner addresses the scope and antecedents of modern cartography. She starts from the recognition that everyone is a mapmaker, whether they are producing pencil sketches with directions, artistic maps in various formats, or professional maps created in GIS. Tyner briefly notes the debate over the relevance of cartography to GIS, a debate due largely to what she sees as frequent misunderstandings as to what a map is. This leads her into the topical question, *What Is a Map?*, to which