

Flattening the Earth, Two Thousand Years of Map Projections.

John P. Snyder. Chicago: The University of Chicago Press, 1997. Pp. xviii + 365, 160 maps, 11 illustrations, 6 tables. Softcover, \$19.95. (ISBN: 0-226-76747-7).

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If John Snyder's book, *Flattening the Earth, Two Thousand Years of Map Projections*, were a rock 'n roll record, if I were on Bandstand, and if Dick Clark were asking me to rate it, I would have to say: "It doesn't have much of a beat. It's not very good to dance to. I'd give it a thirty-five." This is not the book most of us would select if we wanted to curl up by a fire on a cold winter's night for a good read. But, if I were researching any aspect of map projections for a presentation, for a cartographic project, or for personal edification, this would be the first source I would consult. Snyder does not write simply as an observer, and an aficionado, of the history and science of map projection, but as a participant in the process. He has several projections to his credit, including a modified stereographic conformal and a satellite-tracking.

The book's four chapters are arranged chronologically, either by conceptual period (Age of Mathematical Enlightenment) or by century. Each chapter is further divided into two parts. The first part describes all map projections used during the period, and the second details the map projections introduced during that time. Each chapter ends in a table listing in chronological order the name of the projection, figures, if any, the inventor's name(s), the date, and significant design elements (i.e., conformal, standard parallels) for each map.

Readers who desire additional information will welcome the extensive bibliography. In short, Mr. Snyder makes it very easy for even the beginning researcher to find the details for any type of map projection created between Claudius Ptolemy's writing of *Geography*, circa A.D. 150, and Mitchell J. Feigenbaum's Hammond optimal conformal of 1991.

This work contains a large selection of illustrations, most of which are maps, but a few are portraits of some of the later inventors. Comparing the first illustration, a T-O map by Isidore of Seville, 1472, with the last, a gnomonic projection of the world on an icosahedron by Irving Fisher, 1943, presents a contrast in world concept that is interesting to contemplate. Isidore's world map is symbolic. Unlike the twentieth century inventors, he was not trying to depict the planet's surface with the greatest accuracy and least amount of distortion. He was delineating his world as he understood it to be. If it were possible to show Isidore a copy of Fisher's map would he know what he was looking at? Would he be able to recognize Africa, Europe and Asia, continents he outlined on his own map? Isidore had a decided advantage over modern creators of map projections, twenty years before the voyage of Columbus, he was depicting a flat earth.

From the development of calculus in the late seventeenth century, to logarithms, slide rulers, mechanical calculators, and personal computers, advancements in the field of mathematics, as Mr. Snyder points out, have strongly influenced the number and variety of projections that were being created. Prior to the beginning of the twentieth century, there were 85 different projections. Since 1900, 180 projections have been created. Mr. Snyder provides the formulas for many of the projections he describes, detailing the steps the inventors went through to produce the final calculations. The

speed of calculation, resulting from the introduction of the personal computer in modern times, eliminates the need for having a practical application. Maps bounded by rhombi, ellipses and regular polygons are created for the sheer pleasure of it.

The only change I would suggest to this volume would be the addition of a glossary. Otherwise, the high quality of writing, the depth of information and the low price on the paperback edition make this a book worth owning for anyone with an interest in cartography or the mathematics of flattening the earth.

Maps and Politics. Jeremy Black. Chicago: The University of Chicago Press, 1997. 188 pp., Index, Maps, References. \$35.00 hardbound (ISBN0-226-05493-4)

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Does our profession or my library need yet another essay about maps and the compromises that cartographers make practicing our craft? Well, yes, we do. Jeremy Black has thoroughly reviewed the minefields of our profession and added evidence to support his thesis that "subjectivity is central to the production and understanding of maps." (p. 168) Maps must be considered in terms of their social and political context. Maps and politics, as Black sets out to prove, are inevitably intertwined.

In the first chapter, "Cartography as Power," Black acknowledges the limitations of the map medium and examines the choices which must be made that are more than technical. It is also important to recognize how space is understood by the map user and to take into account how people in the past perceived their world. After review-