

H-Net Reviews

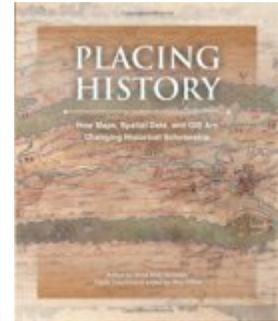
in the Humanities & Social Sciences

Anne Kelly Knowles, Amy Hillier, eds. *Placing History: How Maps, Spatial Data, and GIS Are Changing Historical Scholarship*. Redlands: ESRI Press, 2008. CD-ROM. xx + 313 pp. \$49.95 (paper), ISBN 978-1-58948-013-1.

Reviewed by Imre Demhardt (The University of Texas at Arlington)

Published on H-GAGCS (November, 2009)

Commissioned by Thomas Adam



General Lee, the Dust Bowl, and GIS

Even a historian clinging to more traditional, slow paced research and description methods should be well aware that digital sciences develop increasingly efficient tools in Geographic Information Systems (GIS). Since its first massive intrusion into various fields of historical research during the past decade, a rapidly growing number of studies employ GIS as a tool to process and/or image spatial data. Several of these studies are recorded in *Placing History*, an anthology of ten essays—based on presentations at the History and Geography conference at Chicago’s Newberry Library in March 2004—plus extensive documentation on CD-ROM, which itself illustrates the technological and conceptual progress achieved since Anne Kelly Knowles’s anthology *Past Time, Past Place: GIS for History* (2002). The book under review is mostly for specialists who are versed in GIS. It cannot be recommended to those who do not have a basic understanding of GIS use in historical applications.

Knowles provides in her concise introduction (chapter 1) a brief overview of GIS and history that includes a discussion of major developments and research questions in this field. The focus of this volume rests with three studies exploring advantages and challenges of historical GIS based on U.S. and Chinese examples: Peter Bol (chapter 2) sees the large-scale China Historical GIS-Project very skeptical. This project is symptomatic for many “national” GIS projects that have been conceptualized. The impediments to such undertakings include the noteworthy clash of Western and Chinese digitizing

approaches. This becomes obvious in the deviating hierarchy of the four (space-time) dimensions, the challenge to process two millennia of a well-documented history, the vast but diverse territory, the complex set of incoherent socioeconomic data, and the compatibility with GIS applications.

Robert Churchill and Amy Hillier (chapter 3) hail GIS as a tool of analytical thinking and visualization by stressing its pedagogical value to engage history students. As a practical guide to teach historical GIS, Hillier investigates various expressions of redlining black neighborhoods in Philadelphia. Through the analysis of a wide range of agricultural data sets, Geoff Cunfer (chapter 4) details the decade long buildup of the secular disaster of the Great Plains between the Mississippi River and the Rocky Mountains, the Dust Bowl. He demonstrates impressively the unsuitability of the plains for intensive farming due to its fragile ecological system and extensive cyclic dry periods by using data over various decades.

These core chapters are complemented by a set of more focused and shorter case studies in the application of GIS. Ian Gregory (chapter 5) discusses the importance of spatial statistics in historical GIS by demonstrating various spatial analytical approaches on demographic data from nineteenth-century United Kingdom. Brian Donahue (chapter 6) tracks the environmental changes caused by human land use during colonial times in Concord, Massachusetts, and does justice to the early settlers

who were all too often considered bad farmers. Michael Goodchild (chapter 7) explores the potential, and difficulties, in spatial analyses of temporal data. He argues that GIS users should not think of GIS as working with static sets of information but rather temporal expressions in a spatial frame. Richard Talbert and Tom Elliott (chapter 8) revisit the Peutinger Map, a unique survivor of Roman street maps, by identifying and geo-referencing place and line features in nowadays France. The string of case studies is concluded by a chapter by David Bodenhamer (chapter 9), who considers the implications of GIS for history as a discipline, which is not quite leaping forward to embrace this technology, and a chapter by Knowles and her students (chapter 10) presenting a virtual analysis of "What Could Lee See at Gettysburg?"

Following a brief final chapter with a personal agenda for the future course of Historical GIS by Knowles, Hillier, and Roberta Balstad, suggesting that critical GIS and a feminist approach can advance a "critical" perspec-

tive, the anthology concludes with an extensive bibliography, which, besides topical sources, also offers a good register of recent GIS-technique centered books and articles; an appropriately detailed index list, enabling more reference-minded readers to locate their interest and a digital supplement on CD-ROM edited by Hillier. Its eleven PowerPoint files, coming together with ArcExplorer in Java Edition as GIS software, are arranged in three groups. First, the files include four presentations complementing chapters 1 through 4 by Knowles, Bol, Hillier, and Cunfer. Second, Cunfer's chapter and presentation are further complemented by five timeline animations visualizing data between 1874 and 1945, all relating to the Dust Bowl disaster. And finally, this topic opens the last group of files comprising three GIS projects and map layers: Cunfer on agriculture in the western United States from 1880 to 1945, Hillier adding to her chapter and presentation on redlining in Philadelphia, and Bol on Chinese GIS.

If there is additional discussion of this review, you may access it through the network, at:

`/~gagcs/`

Citation: Imre Demhardt. Review of Knowles, Anne Kelly; Hillier, Amy, eds., *Placing History: How Maps, Spatial Data, and GIS Are Changing Historical Scholarship*. H-GAGCS, H-Net Reviews. November, 2009.

URL: <http://www.h-net.org/reviews/showrev.php?id=25073>



This work is licensed under a Creative Commons Attribution-NonCommercial-No Derivative Works 3.0 United States License.