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)

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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 Eliott (chapter 8) revisit the Peutinger Map, a unique survivor of Roman street maps, by identifying and geo-referencing