Geographical Information System (GIS) technologies have made great advances in recent years. This compact book is an excellent beginners’ guide to the basic principles of using GIS in carrying out historical research. Put simply, GIS allows researchers to place spatially referenced data (for example, the location of burial sites), along with attributes of that data (for example, names of sites, or artifacts found), into layers with different characteristics (for example, burial site locations, terrain features, and road networks) that can be integrated and spatially analyzed (for example, to determine the relationship between burial sites and road networks).

The book covers the jargon used in GIS; how vector and raster models work; how to acquire spatial data; how spatial data sets can be queried for information, integrated, and manipulated; how the time factor can be introduced into a GIS model; how to make historical maps, atlases, and animations; how to perform spatial analysis of both statistical and qualitative data; and how to preserve and document spatial historical data. The illustrations are well done. Although there are several good examples of historical research that used GIS, more would not have hurt.

This book is especially to be commended for its cautions about the use of GIS by historians. Many historical data are not amenable to GIS analysis. Great care must be taken in acquiring spatial data, such as ancient maps, data points from Global Positioning System (GPS) units, or satellite imagery, and making sure that all of it is as accurate as possible. Monetary and time costs merit serious consideration; GIS projects are rarely short-term. (My own experience with using GIS in geography projects is that it is easy to underestimate, grossly, the time that even highly skilled research assistants would need to carry out GIS procedures.) GIS, as the authors point out, has a steep learning curve. Used carefully and thoughtfully, however, it can provide useful information and aid in analyzing historical trends.

Historians should take special note, “Unfortunately most commercial GIS software packages do not include temporal functionality” (36). As Gregory points out, this situation presents obvious problems but also allows researchers to contrive imaginative uses of GIS, as examples in the book illustrate. Prospective users of GIS should also be aware of the academic debates that have surrounded its use. Proponents have faced the charge that they are limited to positivist research. 1 That historical data do not always lend themselves to quantitative analysis makes Section 8 on “Qualitative Data” of great importance to historians. In addition, users of GIS should consider the ethical, economic, and political issues that arise from their work.

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