BOOK REVIEW

Geographic Information Systems and Crime Analysis

Review by Omar Khan, International Journal of Health Geographics, USA

Geographic Information Systems and Crime Analysis
by Fahui Wang
HC: ISBN 1-59140-453-3; $84.95
SC: ISBN 1-59140-454-1; $69.95
300 pp.; Copyright 2005 Idea Group Publishing

GIS is growing into a widely utilized tool in a variety of applications. Crime analysis is no exception. As Dr. Wang points out, this area cuts across disciplines of academia and applied work. Examples include criminology, law, urban studies, sociology, and, of course, geography and information systems.

The book provides an overview of the burgeoning use of GIS technology in these areas via papers divided into the following sections:

I. GIS and Data Sharing
II. Data Issues in Crime Studies
III. Geographic Profiling
IV. Crime Monitoring and Racking
V. New Methods and Technologies
VI. Crime and Community Characteristics

Predictably, some areas are better fleshed out than others (e.g., the section on community characteristics has two chapters, while the chapter on new technologies has five. However, each section is arranged logically and covers an appropriate breadth of material.

Crime mapping may seem like a new idea, but, in fact, the concept is not as new as the technology now used to support it. Criminologists and law enforcement officers have probably mapped crime for quite some time and targeted their interventions based on these profiles. However, these older methods remain notoriously imprecise — in many instances, it is easy to identify the worst-hit and crime-ridden neighborhoods but less obvious as to where the criminals actually reside. Similarly, law enforcement groups may profile certain groups or areas too broadly and, therefore, risk painting everyone with the same broad brushstroke — the statistical crime of high sensitivity and low specificity. Thus, detecting patterns of crime over time and across space larger than a neighborhood can be difficult and nonintuitive. GIS is proving to be a potentially invaluable tool in automating many of these processes as well as clarifying areas of methodological difficulty.

This represents perhaps the most applied extreme of GIS technology in crime analysis. Other areas of interest remain no less important: mapping community characteristics, exploring the use of remote sensing and Geo-Po-
sitioning Systems (GPSs), and even newer ar-
eas such as using computer automatons for
crime simulations.

Underpinning the most basic interpreta-
tion to the most advanced analysis of crime
geographics remains the data, and thus, the
discussion of Data Issues in Crime Sharing via
papers such as the one discussing the concept
of GIGO (Garbage In, Garbage Out) is relevant,
timely, and interesting.

Criticisms of the book are few. The most
obvious one is that in a publication focusing
on mapping applications, color maps or higher-
quality images may help make the point in a
clearer fashion. One recognizes, however, that
this may bring about an accompanying price
hike, so a reasonable compromise might be to
include a CD with the maps/images submitted
by the authors.

Overall, the book admirably fulfills its aim
of unifying the theoretical with the practical. It
thus would seem to fill a valuable niche in the
collection of the academic or practicing crim-
ologist as well as law enforcement personnel
interested in the cutting edge of crime
geographics.

Omar A. Khan, MD MHS, is on the editorial board of the International Journal of Health
Geographics (www.ij-healthgeographics.com) and the founding co-chair of the International
Health Geographics Conferences.