# Patterns in Crime

Brantingham / Brantingham

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**Paul and Patricia Brantingham**
Simon Fraser University

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DEDICATION

# To our son Jeff



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# Preface

This book presents a broad range of advanced-level information about the spatial and temporal patterns of crime in the United States, in England and Wales, and in Canada. We have assumed that students using this book have previously completed an introductory course in methods of social science research. Within the context of that assumption, the book provides detailed comparative information about crime patterns and should prove useful in courses on crime analysis or criminal justice planning. In a more general fashion, the book should be useful in courses on the history of crime and the geography of crime and might also supplement an upper-division survey course on criminology.

Chapter 1 provides a general introduction to the fields of criminology and criminal justice and distinguishes between them. *Criminology* is defined as the empirical science of crime and criminal events, studied in a manner basically consistent with Ernst Nagel's views on the structure of science. *Criminal Justice* is defined as the policy science of crime control. The subject of *Patterns in Crime* is criminology.

Chapters 2, 3, 4, and 5 comprise a major division of the book. These chapters are committed to a discussion of the sources of information about crime. Chapter 2 describes memoirs and other first-person accounts of criminal events. Chapter 3 describes data provided by the criminal justice system. Chapter 4 describes survey sources of information about criminal events: self-report studies and victimization studies. Chapter 5 provides a strategy for using multiple information sources in criminological research.

The second major division of the book might be titled "The Temporal Harmonics of Crime." This division—Chapters 6, 7, and 8—explores the temporal patterns of criminal events. Chapter 6 provides a brief introduction to temporal analysis in criminological research, moving from a very simple visual inspection of graphed, temporally arrayed data to fairly sophisticated time-series analysis. Chapter 7 traces trends in American, English, and Canadian crime since 1960, examines the major correlates of these modern trends, and considers a number of the major explanations for the crime trends and their correlates. Chapter 8 traces historical trends over very long periods of time: 800 years for England; 350 years for the United States; a century for Canada. Social, economic, demographic, and institutional changes are examined.

The third major division of the book examines the spatial dynamics of crime. Chapter 9 provides a brief introduction to the geographic imagination and to spatial analysis. Chapter 10 examines macrogeographic patterns in crime at the international, intranational, and intercity levels. Chapter 11 traces patterns of crime within the city. It contains much of the material traditionally considered part of the ecology of crime. Chapter 12 examines microspatial crime patterns, the recent findings of researchers working in the field known as *environmental criminology*. This chapter provides information about the patterning of criminals' target choices and how the physical and social structure of the city influences criminal events.

We would like to thank a number of people for their help with this book. Aileen Sams typed large segments of the manuscript. Professor Lee Bowker provided many helpful suggestions and comments. Our editors at Macmillan Publishing Company, especially Kenneth J. Scott, Senior Editor, and Juli Barbato, Production Editor, were supportive, flexible, and helpful throughout.

Finally, we would like to say a word about order of authorship. This book is in every respect a completely joint effort. There is no meaningful "first author/second author" distinction to be made. The requirements of Library of Congress cataloging in publication data dictated that one name should appear first. Order of authorship was selected by a coin flip.

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# 1

# Patterns in Crime

## Introduction

The study of crime is one of the most important pursuits of the social sciences, for two very different reasons: (1) Crimes are inherently dramatic events. They cause great harm and elicit a strong social response. People find tales of mass murder more interesting than reports of an increase in coal production or a decline in the fertility ratio. People are entertained by a thief's coup in taking a jewel from a heavily guarded museum, but they are bored by the everyday heroics of sanitation workers, assembly-line supervisors, or bankers. Robin Hood is legend but the first chancellor of the Exchequer is unknown. As a result, much of social life can be studied through crime and communicated to an audience unreached by parallel studies of similarly important but less dramatic events. (2) Crime is the actual focal point of the consideration of many of the most important issues in social organization. Crime implies punishment and raises the issue of power. It relates the individual citizen to society and government. Crime reflects social decisions about the appropriate distribution of status, privilege, and wealth and about the methods people use to attain them. The patterns of crime have long been seen as a touchstone that reveals the inner composition of society.

This book is about the patterns of crime in Canada, England, and the United States. Although different in many ways, the societies of these countries are similar in several critical respects. They are industrialized societies with high standards of living. They share a dominant language. They have evolved from a single imperial source: a homeland and its North American colonies. They have similar legal systems grounded in the English common law. Most centrally, their laws have developed from a common base and have had a mutual influence even as they have moved apart and differentiated. It is possible, because of these similarities, to compare and contrast Canadian, English, and American crime patterns in illuminating ways.

## Criminology and Criminal Justice

Crime is a complex social phenomenon. Every crime has a legal component (a rule that prohibits specific conduct on pain of punishment) and a behavioral component

(conduct in violation of that rule). Every crime generates the possibility of social response: the enforcement of the law against its violator. The study of crime is currently organized through two principal disciplines: criminology and criminal justice.

## Criminology

*Criminology* is the empirical[1] science of crime. That is, criminologists are concerned with such things as the origins of criminal laws, the origins of criminal motivation, the characteristics of criminal events, and, more recently, the characteristics of the criminal justice system.

In pursuing these concerns, criminologists, like other scientists, engage interactively in three activities: description and measurement, the use of formal logic, and the use of creativity.

### Descriptive Science

The core of science is the constant search for and examination and testing of facts about the thing under study. Statements of fact that are substantiated by evidence, and about which most competent observers agree, can be used to construct explanations of how things happen and to state rules of relationship that permit the prediction of future events. Facts can be used to test the efficacy of suggested rules of relationship through controlled observation and experiment.

An example of descriptive activity in criminology is the history of the study of southern homicide problems in the United States. The relative distribution of deaths caused by homicide in the various American states became an issue of factual inquiry during the 1920s and 1930s as two sets of data were systematically collected for the first time: the vital statistics on causes of death listed in death certificates and crimes known to the police. Both data sets showed that the states of the Old South, states that formed the secessionist Confederacy during the period 1861–1865, had homicide rates that were far higher than the homicide rates recorded in the rest of the United States. This crime differential, measured by two independent data sets, appeared early (Brearly, 1932) and has persisted as the major feature of the American geography of crime (Shannon, 1954; Harries, 1974). This fact proved exceptionally interesting to social scientists during the 1960s, and essentially identical explanatory schemes were advanced by historians (Hackney, 1969) and sociologists (Gastil, 1971): a regional culture of violence had evolved in the South. According to this thesis, people raised in this culture were far more likely to use lethal violence than people raised outside it. Moreover, the culture was strong: it persisted among Southern emigrants and it coopted Southern immigrants. The culture of violence was held to be far more important to an understanding of Southern homi-

[1] The term *empirical* is used in its broad meaning denoting enquiries based on controlled observation of phenomena. (See Nagel, 1961, 450–459.) It is not used in the narrow meaning that denotes enquiries based solely on experiment.

cide rates than such things as racism, poverty, or lack of adequate emergency medical services.

The idea of a Southern culture of violence seemed particularly useful because it offered independent corroboration of an inductively developed model of the origins of individual violence advanced at about the same time by criminologists (Wolfgang and Ferracuti, 1967). But subsequent studies demonstrated that better (or at least alternative) measures of things such as poverty, race, and income variation could diminish the apparent analytic importance of culture to virtually nothing (Loftin and Hill, 1974; Brantingham, 1975b), and that Southerners approved of violent behavior no more than did non-Southerners (Erlanger, 1976). Thus, this particular explanation of Southern homicide became untenable.

In this example, a descriptive fact about American crime had been established. A question requiring understanding, or "explanation," became apparent: Why were Southern murder rates so high? Various *other* fact patterns—considered on the basis of commonly observed associations with crime or the South or both—were compared for their congruence with the pattern of homicide. Some congruencies, such as the apparent fit between homicide rates and climate, were rejected because they required unacceptable assumptions about the character of criminal motivations and criminal events. The climatic explanation, for instance, required researchers to assume that human irritability and aggressiveness—and hence proneness to lethal violence—rise with the ambient air temperature and are biologically determined. Remaining congruencies, such as the fits between homicide and patterns of economic privation, medical service, or historical traditions of violence, were examined more carefully. An explanation was suggested on the basis of the apparent relative importance of these congruencies in predicting the observed homicide rates of the various states. That is, an explanatory model for Southern homicide rates was constructed by comparison with *other* empirical facts. This model was then *tested* by other researchers using refined measurements of such facts as economic deprivation. The model failed the test and was generally abandoned.

## Formal Logical Science

A second activity is the use of formal logical techniques in which statements about the relationships are put precisely, but in general form, and are then extended through the process of logical deduction to state additional or more detailed relationships and to predict additional facts or events. The validity of formally extended statements can be tested internally (against the rules of logic) or externally (against established facts, through observation or experiment).

Examples of formalization in criminology are more difficult to find than examples in physics or economics, but the works of Edwin Sutherland and Jack Gibbs can serve as cases in point. Sutherland probably did more to structure American criminology than any other writer. Gibbs is a contemporary formalist.

Sutherland is known for the development of "differential association" theory, an attempt to codify and abstract extant information about criminal behavior into a sociological theory of the origin of individual criminality. The theory contained nine propositions (Sutherland, 1947, pp. 6–9) asserted to be empirically and logically coherent. DeFleur and Quinney (1966) reduced Sutherland's propositions to

set theory notation and tested their formal logic. They found that the theory was internally inconsistent and proceeded to rewrite it. Reconstructed—that is, rendered logically consistent and stripped of logically unnecessary propositions—the theory of differential association could be stated in forty-six words:

> Overt criminal behavior has as its necessary and sufficient conditions a set of criminal motivations, attitudes and techniques, the learning of which takes place when there is exposure to corresponding anti-criminal norms during symbolic interaction in primary groups. (DeFleur and Quinney, 1966, p. 7)

Gibbs (1972) has been among the foremost in asserting the virtues of formalization in social science. He has used formalization procedures to define the theory of deterrence in which common-law criminal justice is grounded. The formal theory of deterrence has in turn been used to specify detailed hypotheses for factual testing through observation and experiment (Gibbs, 1975). The result has been an extremely fruitful structuring of research into the empirical validity of some basic assumptions underlying the criminal law in Canada, England, and the United States.

### Creative Science

The third activity is the business of creative insight. There is no way to plan for or work toward or guarantee the occurrence of creative insight, yet it is crucial to science. Creative insight leaps beyond the data; it synthesizes facts in a new way; it fundamentally reshapes a disciplinary paradigm and dominates thinking in that area of science for long periods of time afterward. The theory of plate tectonics, which has transformed geology in recent years, is grounded in a creative insight that the shapes of the continents can be fit together like a jigsaw puzzle. From that insight came the theory of continental drift and the ordering of information about the distribution of fauna, the magnetic properties of seabed sediments, and the nature of mountains and earthquakes. Current ideas about the chemistry of inheritance are grounded in the creative insight that genes are structured in a double helix of proteins. Our understanding of the structure of time, matter, and energy is based on Einstein's insights in developing the theory of relativity.

The danger of scientific insight is that it may exercise a powerful hold over generations of scientists and take them in the wrong direction. Criminology has a well-documented example. Cesare Lombroso's sudden insight in 1866 that criminality was biological in origin, produced by a genetic atavism, dominated the field for half a century. Work on matters now held to be far more important was long disregarded as Lombroso's adherents and detractors fought over the question of biological versus sociological single causes in the making of criminal careers.

## Elements of Criminology: The Empirical Science

Empirical science, of course, is not one of these three activities, but all of them. Scientific knowledge is not gained by following the steps in a checklist guide to

good research. It comes from an interaction of description and formalization and insight that moves back and forth as advances in one approach make advances possible in another. Science is an iterative process, now descriptive, now intuitive, now formal. What is clear, is that an empirical science advances through constant reference back to descriptive information. This is the test for both formal models and creative insights: their fit with factual data (Kuhn, 1970; Nagel, 1961).

## Descriptive Studies of Crime

As empirical scientists, criminologists have been concerned about describing the characteristics of criminal events in terms of temporal and locational patterns, the offenders' techniques, the victims' characteristics, and the like. A significant number of systematic descriptive studies of crime now exists for Canada and England and the United States. For instance, burglary has been studied in depth for Washington, D.C., and Toronto; for Sheffield (England), Tallahassee (Florida), and Portland (Oregon); for a small city in northern Ontario and a town in Massachusetts. Robbery has been described for London, Boston, and Oakland, California. Homicide has been analyzed for Philadelphia, Chicago, and Houston. The descriptive literature is now extensive, but it remains diffuse, in the form of scattered individual reports.

## Criminal Law

The origins of criminal law—that is, the methods and purposes of the people who enact the laws and the social structures and social dynamics associated with lawmaking—have been studied by criminologists only lately. As recently as 1972, the English criminologist Hermann Mannheim and the American criminologist C. R. Jeffery engaged in a bitter debate over whether "criminology" properly includes what Mannheim (1972) referred to as "the sociology of criminal law."

Jeffery's position in that debate appears to have prevailed. Criminal-lawmaking is currently a major area of criminological research. The literature in this area, as is true of the descriptive analysis of criminal events, remains diffuse (Brantingham and Kress, 1979). A few attempts at synthesis have been made (Black, 1976; Chambliss and Seidman, 1971), but they have not been generally acclaimed. They have certainly not shaped a major paradigm for the field.

## The Criminal Justice System

The characteristics of the criminal justice system have been studied rather more extensively than either the criminal event or the origins of criminal law. Correctional institutions such as prisons and probation services have long formed the job market for criminologists outside the universities and have been extensively described in England, in Canada, and in the United States. Police and the courts have been studied less than correctional institutions. Research into the institutions of criminal justice has increasingly been seen as falling within the province of the discipline of criminal justice.

An exception is research into the *criminogenic* characteristics of criminal justice