HOW POLICING AFFECTED THE VISIBILITY
OF CRIME IN NINETEENTH-CENTURY
EUROPE AND AMERICAN

Charles Tilly
University of Michigan
U.S.A.

Allan Levett
Victoria University of Wellington
New Zealand

A.Q. Lodhi
University of Waterloo
Canada

Frank Munger
Antioch College
School of Law
U.S.A.

CRSO Working Paper #115

Copies available through:
The Center for Research On Social Organization
University of Michigan
330 Packard Street #214
Ann Arbor, Michigan 48104
HOW POLICING AFFECTED THE VISIBILITY
OF CRIME IN NINETEENTH-CENTURY
EUROPE AND AMERICA

Charles Tilly
University of Michigan
U.S.A.

Allan Levett
Victoria University of Wellington
New Zealand

A.Q. Lodhi
University of Waterloo
Canada

Frank Munger
Antioch College
School of Law
U.S.A.

to appear in Theodore Ferdinand, ed., The Criminal Justice System
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of figures</td>
</tr>
<tr>
<td>List of tables</td>
</tr>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>The visibility of crime</td>
</tr>
<tr>
<td>Policing and crime</td>
</tr>
<tr>
<td>Hypotheses about the historical experience</td>
</tr>
<tr>
<td>Canada</td>
</tr>
<tr>
<td>Municipal policing in Canada</td>
</tr>
<tr>
<td>Policing and recorded crime</td>
</tr>
<tr>
<td>Policing and the visibility of Canadian crime</td>
</tr>
<tr>
<td>United States</td>
</tr>
<tr>
<td>The pattern of police development in the United States</td>
</tr>
<tr>
<td>Federal police</td>
</tr>
<tr>
<td>State police</td>
</tr>
<tr>
<td>County police</td>
</tr>
<tr>
<td>City police</td>
</tr>
<tr>
<td>Private police</td>
</tr>
<tr>
<td>The growth of policing and arrest rates in nine U.S. cities</td>
</tr>
<tr>
<td>England</td>
</tr>
<tr>
<td>The development of English criminal statistics</td>
</tr>
<tr>
<td>Trends in crime, 1805-1892</td>
</tr>
<tr>
<td>Changes in British policing, 1800-1900</td>
</tr>
<tr>
<td>The impact of full-time policing</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>The expansion of professional policing in France</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS (CONT.)

Politics and policing ........................................ 86
Trends in recorded crime in France........................ 90
Conclusions.................................................. 99

Appendix Tables
Figures
Footnotes
References
LIST OF FIGURES

Figure

1 Rates of conviction for all offenses (indictable and non-indictable) per 100,000 population for Canada, 1876-1921.

2 Rates of conviction for indictable offenses per 100,000, Canada, 1886-1921.

3 Property arrests and police size per 100,000 population in Boston, Chicago, San Francisco, 1824-1920.

4 Property arrests and police department size per 100,000 population in New York and Denver, 1845-1927.

5 Property arrests and police department size per 100,000 population in Charleston and New Orleans, 1856-1920.

6 Property arrests and police size per 100,000 population in Philadelphia and St. Louis, 1856-1920.

7 Boston: arrest rates per 100,000 population for different types of offenses and police size, 1834-1920.

8 Indicators of professional policing in France, 1825-1898.

9 Rates of criminal charges for major categories of offense, France, 1825-1900.
## LIST OF TABLES

### Tables in Text

3. Size of police territory, police per square mile and estimated property arrest rates in five U.S. cities, 1870 and 1880.
4. Zero-order correlations of annual measures of policing and visible crime, various years, France, 1828-1900.

### Appendix Tables

Introduction

Writing in the 1790s, Patrick Colquhoun opened his treatise on the *Police of the Metropolis* by declaring that "The enlarged state of Society, the vast extent of moving property, and the unexampled wealth of the Metropolis, joined to depraved habits and loose conduct of a great proportion of the lower classes of the people; and above all, the want of an appropriate Police applicable to the object of prevention, will, after a careful perusal of this work, reconcile the attentive mind to a belief of the actual existence of evils which could not otherwise have been credited" (Colquhoun 1800: 4). His prescient, fact-filled treatise laid out a simple argument: that rising commercial prosperity increased the amount of movable property exposed in public places; that the more property exposed, the more stolen; that prosperity also led, in several different ways (Drink being prominent among them), to a decay in the morals of the lower classes; that moral decay likewise promoted a rise in thievery; that intelligent policing could check crime not only by a) increasing the surveillance of property in public places but also by b) raising the disincentives to crime—making them more effective rather than, as was then the habit, by making them more severe—and c) controlling the sources of moral decay, such as wineshops, prostitution and gambling.

Much of Colquhoun's wisdom has since become conventional wisdom. The British used Colquhoun's arguments in building up a metropolitan police force, and then national police forces, thirty to fifty years later. Yet even now, close to two centuries after Colquhoun wrote with such force and such ample documentation, we are uncertain which parts of his argument are correct.
Our uncertainty is curious, but not inexplicable. It is curious that we have made fewer improvements on Colquhoun's theories than on those of his near-contemporaries, Adam Smith and Thomas Malthus. One might have thought Colquhoun would be easier to improve on. But Smith and Malthus left central ideas whose combination of generality, simplicity, rigor and verifiability opened a wide way to further inquiry. The moral-decay side of Colquhoun's scheme contained crucial ambiguities, and assimilated all too easily into existing prejudices concerning the character (or lack of character) of the poor. Finally, a number of major elements in Smith's and Malthus' arguments corresponded to observable aspects of social life--wages, prices, birth rates, agricultural production--which were already being measured widely, and sometimes being measured effectively. The same cannot be said for crime and moral decay.

Let us resume the effort of improving Colquhoun. This paper makes a small contribution to the formulation of appropriate arguments about the effects of the power, range and efficiency of law-enforcement agencies on recorded crime. We lay out an elementary view of the determinants of property crimes, offer some hypotheses about the effect of long-range changes in policing on total property crime and recorded property crime, and present relevant evidence from the nineteenth-century experiences of Canada, the United States, England and France.

The Visibility of Crime

Tracing the ebb and flow of crime is like estimating an economy's production of personal services. The definitions of services fluctuate so much, and so much goes on outside the market, that changes in definition, changes in registration and changes in production are
terribly hard to distinguish. "Crime," like "personal service," covers a heterogeneous set of behaviors. The common property of criminal kinds of behavior is simply that there are laws against them, and agents empowered to enforce those laws.

In reconstructing the history of crime, we can reduce our difficulties by squarely recognizing the situation, instead of treating it as an inconvenient obstacle on the way to the truth. Just as by "personal services" we ordinarily understand those services which enter the market, by "recorded crime" we can understand the registration by law-enforcement agencies of violations of the law.

Our general reasoning follows that of Boudon and Davidovitch in France and Reiss and Black in the United States (Bordua and Reiss 1967, Reiss 1970, Black 1970, 1971 and 1972, Davidovitch 1970, Davidovitch and Boudon 1965). The central social fact we have to account for is not infractions of the law, but the activation of the criminal justice system against infractions of the law. The notion of a "true" crime rate is a chimera. It is a fiction, if only because a large proportion of the criminal statutes of almost any government are not enforced. Are infractions of unenforced, or unenforceable, statutes part of the "true" prevalence of crime? If not, by what standard do we include statutes which are inefficiently or selectively enforced?

We can't, however, dispense with the idea of a pool of prohibited behavior out of which police and prosecutors select some cases for action. The idea is a useful simplification of reality; for a few well-defined prohibited behaviors, such as homicide, we even have some hope of matching the theoretical construct with
estimates of the "true" prevalence of the behavior. For the most part, however, the idea of a true prevalence rate will serve as a convenient fiction on the way to the study of recorded crime.

Several different kinds of indices can serve our purposes: crimes known to the police, individuals charged with crimes, and others. Since recording refers to the behavior of law-enforcement agencies, some visible crimes will be optical illusions: accidental deaths identified as homicides, losses reported as thefts, assaults which never occurred.

The volume and distribution of recorded crime change as functions of three factors:

a. shifts in the range of behavior which law-enforcement agencies are empowered to record;

b. alterations in the agencies' procedures for detecting and recording prohibited behavior; they depend not only on the organizational structure but also on the willingness of citizens to report, and of officials to pursue, infractions;

c. changes in the frequency or distribution of the prohibited behavior.

Under ordinary circumstances, we have official records which display fluctuations in crime, and we want to allocate the fluctuations among the three factors. If we are lucky or skilled enough to be able to estimate or to hold constant any two of the factors, then we can reasonably make inferences concerning the behavior of the third factor from fluctuations in recorded crime.

On the whole, we are much more likely to have reliable information concerning the power and the procedures of law-enforcement
agencies than concerning the frequency of prohibited behavior. Most often, therefore, we will be trying to deduce fluctuations in the pattern or volume of some sort of prohibited behavior from fluctuations in its recorded portion; we will do so by means of an argument concerning the action of the other two factors--that they are constant, that they display some steady trend, that they follow a certain pattern of bias, or some other argument.

**Policing and Crime**

The relationship between policing and crime--recorded or total--is nicely complex. It is a feed-back relationship: the volume and pattern of crime continuously affect the volume and pattern of policing, and vice versa. Suppose by "policing" we mean the detection and apprehension of violators of laws, and by professional policing we mean the activity of full-time government employees specialized in the detection and apprehension of violators of laws. Policing is as old as law. Professional policing, on the other hand, is a rare and recent historical phenomenon. Although it has a few interesting precedents, it is essentially a creature of the modern national state. European states, for example, had police powers of various sorts from their very beginnings. That is, indeed, how we recognize them as states. But before the nineteenth century, they usually enforced their laws through temporary assemblies of citizens and through officers and agencies whose primary activities were not the detection, apprehension or punishment of criminals.

As David Bayley has noted, the forms of specialized police agencies which grew up in different western states corresponded faithfully to the organization of other branches of the national
administration (Bayley 1971, 1974). Corresponding to their intense national centralization, for example, both France and Italy have just two thoroughly national police forces (Sureté Nationale and Gendarmerie; Guardia di Pubblica Sicurezza and Carabinieri). Germany, organized in a federal structure, does most of its policing through separate regional police forces, each responsible to a state legislature. Although these contemporary police forces all had eighteenth-century antecedents, they generally crystallized, along with other national administrative structures, in the nineteenth century; after that, they changed relatively little.

If the organizational forms of police forces were already fairly fixed by some time in the nineteenth century, their sizes and geographic distributions were not. In all western countries, the range and intensity of professional policing have increased greatly in the last two centuries. France is one of the examples we take up later. In 1850, France had about 20,000 full-time professional police. That was after a half-century of expansion in policing. By 1950, the number of full-time professionals was around 138,000 (Le Clere 1964: 121-122). The rise went from about 15 to about 70 police per 10,000 persons in the labor force, from about 6 to about 35 per 10,000 in the general population. If we can use the relative rates of growth of the Gendarmerie (with fundamental responsibility for rural patrolling) and the National Police (operating mainly in cities and towns) as evidence, policing in France urbanized more rapidly than the general population did during that century. As the Gendarmerie about doubled in size, the National Police multiplied by twenty.
Not all countries followed the same course or the same pace. A major point of this essay is to establish the differences in policing among countries. Nevertheless, the rise of professional policing occurred throughout the Western world as industrialization, urbanization, and the concentration of power in national states proceeded. We are not sure how much of the common trend is due to imitation from country to country, how much due to similar responses to situations inherent in rapid social change, how much due to by-products of other processes such as bureaucratization or the professionalization of work. We are sure that there is a causal connection between the expansion of policing and the formation of strong states with urban-industrial social organization.

What effect did the expansion of policing in Western countries have on the frequency of crime? That depends on whether we are discussing total crime or recorded crime. Consider recorded crime first.

The intensification of policing undoubtedly tended to raise the proportion of all violations of the law which came to the attention of crime-control specialists and thereby became visible. Let's stress the tended: to the extent that legal prohibitions of different kinds of behavior or incentives to violate existing laws expanded faster than the intensification of policing, the actual proportion becoming visible declined. In at least the early stages of the growth of policing in Western countries, we guess that policing grew more rapidly than the scope of the law or the incentives to violate it, and that at least part of the widespread increase in reported crime during the early nineteenth century results from a rise in crime's visibility.
And total crime? That is even more debatable. We are inclined to believe (and will later lay out some evidence supporting our belief) that the net effect of policing is to diminish the frequency of illegal acts by increasing their probable cost. That is least likely for individual victimless crimes such as vagrancy, where the essence of the offense is to be discovered in a certain condition by an officer of the law. It is debatable for crimes against persons such as homicide, rape and assault, where a calculus of costs and benefits is generally hard to apply. Policing probably has a somewhat more direct negative effect on collective victimless crimes such as unlawful assembly, because the probability of police surveillance or retaliation raises the cost of mobilizing the group in the first place. The strongest negative net effect, however, should touch crimes against property, especially those which yield an immediate material return to the criminal; there, shifts in relative costs of acquiring the gain legally or illegally should significantly affect the frequency of illegal means, and policing should strongly affect the costs of illegal means.

Implicitly, our ordering of these rough categories of crime depends on two variables: 1) the extent to which the potential law-breaker makes a deliberate comparison of legal and illegal means before commencing the behavior in question, 2) the extent to which professional police are likely to observe or be available for sanctioning the illegal behavior. The second variable, in turn, has two rather different components: 2a) the extent to which infractions occur in spaces which police can routinely monitor, which means essentially in public spaces, 2b) the extent to which interaction
with an officer of the law enters into the determination of whether the infraction has taken place.

To the extent that the potential law-breaker makes a deliberate comparison of legal and illegal means, policing will have a strong negative effect on the behavior in question: policing raises the relative cost of the illegal alternative. There is no reason to think, however, that the effect of policing on visibility is greater for infractions involving deliberate comparison of legal vs. illegal means than for infractions involving no such comparison. There may even be a slight negative effect of policing on visibility in this regard: to the extent that the potential criminal weighs legal against illegal means, his incentive to choose means which are likely to escape detection rises with policing. Concretely, our reasoning comes down to this sort of thing: all other things being equal, actual violations of laws governing stock transfers (which presumably involve considerable prior reflection on legal, semi-legal and illegal means) decline more decisively in response to policing than do actual violations of laws governing child abuse (which presumably involve little prior weighing of illegal and legal means), but when it comes to effect of policing on their visibility, there is not much difference between the two kinds of offenses.

To the extent that a certain kind of offense is concentrated in public spaces, policing will tend to diminish its frequency, but greatly increase the visibility of those offenses which occur. The contrast between public drunkenness and fornication is a possible case in point; if our hypotheses are correct, the actual prevalence of public drunkenness (although not necessarily of drunkenness in
general) should decline with policing more than the actual prevalence of fornication does, and the visibility of such public drunkenness as does occur should increase much more than the visibility of such fornication as does occur.

To the extent that the definition of an offense includes interaction with an officer of the law, the expansion of policing will tend to increase its prevalence, and also to increase the visibility of those infractions which actually occur. Offenses such as resisting arrest, obstructing justice, contempt of court, as well as some versions of unlawful assembly, rate high on this variable; our hypothesis says that they should increase as a function of policing more rapidly than do all other kinds of offenses.

If these hypotheses were correct, they would provide a way of estimating the fictitious but necessary "true" prevalence of crime from information concerning recorded crime. We already have open to us the possibility of using independent estimates of the "true" prevalence (from unobtrusive observation, polling, indirect measurement of property losses, and so on) to arrive at under-reporting ratios for different categories of offenses, and then to apply those ratios in reverse to new reports of law enforcement. Our argument suggests another possibility: a general weighting strategy for different classes of estimates. For example, one would greatly inflate estimates of offenses which concentrate in public spaces if policing were feeble, but inflate them much less if policing were extensive. On the other hand, whether an offense entailed prior weighing of legal against illegal means would not affect how much we inflated our estimates in the presence or absence of heavy policing.
Let us close in on property crimes. By our argument, the "true" prevalence of property crimes—everything else being equal—should decline significantly as a consequence of increased policing. Property crimes are quite likely to involve prior weighing of legal vs. illegal means, have some tendency to occur in public rather than private spaces, but depend very little on interaction with an officer. As a consequence, the visibility of those property crimes which occur should increase moderately with expanded policing: more than homicide, perhaps, but much less than most public order crimes.

Everything else is not equal. Other factors than policing affect the pattern and frequency of crimes against property. We can group those other factors under the following general headings: 1) the extent of private property, 2) the need for property, 3) control of the propertyless, 4) location of property, 5) probable penalties of misappropriation. In the particular historical context we are studying, the five factors translate in approximately this fashion:

1. The proportion of all valued property which is under the control of individuals or small groups and protected by the law; the higher the proportion, the more frequent the crime.

2. The extent to which acquiring property makes it possible for people to carry on their valued day-to-day activities, vs. the extent to which not having property makes these activities impossible; the greater the facilitation, the more frequent the crime.
3. The extent to which the relatively propertyless live their lives under the immediate, comprehensive supervision of those who control property, as opposed to being alien to them, unconnected with them or controlled only indirectly by them, the more immediate and comprehensive the supervision, the less frequent the crime.

4. The extent to which valued property is accessible in or from public spaces, and can be moved easily into private spaces; the more accessible and easily moved, the more frequent the crime.

5. Prevailing estimates of the probable penalties (= probability x severity) of apprehension for misappropriation of property; the higher the estimates, the less frequent the crime. The three main factors behind those prevailing estimates are probably:
   
a) the extent of surveillance of employees handling their employers' property;
   
b) the efficiency of accounting systems in organizations handling movable property;
   
c) the availability and efficiency of policing.

Our list is long. Yet it excludes such variables as the presence of criminal subcultures, the pace of social change, the extent of personal disorganization and the availability of criminal role models—to mention a few factors often named in discussions of the causes of crime. Although it leaves plenty of room for individual irrationality and compulsion, the list treats large variations in property crime as functions of the ease and advantageousness of the illegal acquisition of property.
Policing enters the argument most directly in Factors 4 and 5: as a check on the accessibility and mobility of valued property, as an influence on the probable cost of apprehension for violating the law. But it also has something to do with the other factors. In general, a rising intensity of policing decreases the advantageousness and, especially, the ease of illegal property acquisition.

Hypotheses about the Historical Experience

In order to apply this line of argument to western historical experience, we have to estimate the timing, magnitude and relative impact of changes in the many variables on the list. We shall do far less than that: simply sketch some of the main trends and connections. Let us go quickly down our checklist of factors affecting the frequency of property crime:

1. **Property controlled by individuals and small groups:**
   From 1800 until at least the end of the century, this proportion surely increased, although after 1900 the rise of large organizations and the expansion of government may have countered the trend. Net effect: to promote property crime until at least 1900.

2. **Necessity of property for valued activities:** increasing continuously since 1800, and thereby promoting property crime.

3. **Propertyless under immediate surveillance of property:** declining more or less continuously since 1800, probably with some acceleration (resulting from increasing homework segregation, declining importance of domestic servants,
etc.) in the twentieth century. Consequence: promotion of property crime, especially in the twentieth century.

4. **Accessibility and mobility of valued property:** increasing slowly with nineteenth-century urbanization, more rapidly with twentieth century, as epitomized by automobile theft. A trend partly compensated for by the increased intensity, efficiency and generality of policing of public spaces. Net effect probably some promotion of property crime, especially in the twentieth century.

5. **Prevailing estimates of the penalities of apprehension:** rising continuously, mainly as a function of expanded policing. Result: strong tendency for property crime to decline, all other things being equal.

For the nineteenth century, we suggest that Factor 5 outweighed all the others. Policing expanded and became more efficient throughout the western world, although the pace, timing and form of the change varied considerably from place to place. The arrival of a policed world was so rapid and powerful a change that it counteracted the many factors promoting a rise in crimes against property. Total property crime (or, at least, the rate of property crime, based on total population) fell. During the twentieth century, we suggest, policing continued to exert its negative effect, but at some point the countervailing factors actually countervailed; total property crime began to rise.

Think back, however, to the distinction between total and recorded crime. Our arguments imply a different trend for recorded crime. We expect efficient policing to have a more
rapid effect on the visibility of crime than on its overall frequency. For the nineteenth century, when the efficiency of policing is going up and the real frequency of property crime is going down, we expect to find two phases: 1) a dramatic rise in recorded property crime, due to a rapid increase in the proportion of total property crime made visible by policing, 2) a gradual decline in recorded property crime, due to the longer-run effects of policing on criminal behavior. Obviously, the arguments we have laid out anticipate a third phase: 3) rising recorded property crime, as policing expands more slowly than the other factors affecting property crime and those other factors do their work. In this paper, we neglect the third phase and deal mainly with the nineteenth century.

Although most of the points we have made in this introduction are already lodged in one part or another of criminology, two of our notions are implausible at first sight. One is the large weight we attribute to policing in the control of property crime. The other is our assertion that the frequency—or at least the rate—of property crime actually went down during that nineteenth century in which so many western authorities felt they were besieged by thieves and ne'er-do-wells. We will devote the rest of our essay to making those two notions more plausible. Our method will be simply to sketch the evolution of policing in four western countries—Canada, the United States, England and France—review trends in recorded crime in those countries, then discuss the links between policing and criminal trends in each case.
The emphasis in the sections which follow and the data on which they draw vary with the approach of the four authors and with the availability of evidence for each country. We have tried, therefore, to include comparable data on property crime rates for each country beginning with the earliest date at which a continuous series becomes available. For easy reference these series have been placed in appendices at the end of this chapter.

Canada

Policing in Canada is carried on at three levels: national, provincial and municipal. The Royal Canadian Mounted Police (R.C.M.P.) is the federal police force which also acts as provincial police in a number of provinces and as municipal police where there is no such force. Provincial police forces such as the Ontario Provincial Police, Quebec Provincial Police generally replaced the rural constabulary; all areas outside the control of municipal police forces fall within the jurisdiction of the respective provincial police.

The policing of cities and towns is mainly a responsibility of Municipal police forces, which constitute 54 percent of the total forces (23,969 out of 43,762 in 1971) in Canada. The R.C.M.P. is the other major force: 25 percent of the total (10,960). Under direct control of the Minister of Justice, the R.C.M.P. is headed by a commissioner stationed in Ottawa. The rest of the forces include the Ontario Provincial Police, the Quebec Provincial Police and other special forces such as Canadian National Railway, Canadian Pacific Railway and the National Harbours Board Police.
Besides these full-time police forces a large body of security guards (very often uniformed, trained and full-time paid) exist to watch business places, plazas, buildings. Their jurisdictions are limited, they are not part of the full-time police forces, and they do not want to be known as such.

While the jurisdiction of the R.C.M.P. extends to the entire country to enforce laws made by the Canadian Parliament, assist departments of the Government of Canada whenever necessary, and maintain security and intelligence services, the jurisdictions of provincial forces are limited to their respective provinces; they mainly enforce laws in rural areas without municipal police forces of their own. All cities are responsible for maintaining their own forces.

From 1873, when the Northwest Mounted Police force was inaugurated, annual reports of the force were published regularly. The reports provide information about the activities of the force and crimes within its geographical jurisdiction. Turner's (1950) chronological history of the force is mainly based on these reports; it sums up the activities of the force from 1873 to 1889. In the meantime upper and lower Canada were policed by the Dominion Police, which was amalgamated with the R.C.M.P. in 1920. For lack of data about the Dominion Police, we are limiting our discussion of federal policing to the R.C.M.P.

We can trade the emergence of police in Canada back to the Police Ordinance of 1839; it was similar to the London Police Act, which empowered the government to raise both mounted and foot constables. In 1845, after a workers' disorder at the
Welland and St. Lawrence canal, another act authorized the Governor in Council to raise "a body of men not exceeding 100 exclusive officers and to be called the 'Mounted Police'." There is evidence that such a police force was raised. (Under Captain John Wheeler, the force acted in a riot at Thorold.) In 1849, the government raised the Mounted Constabulary Force, consisting of 50 men, mainly to protect parliament and other public buildings.

There were other political circumstances which inspired the Canadian government to create a federal police force. The Canadian Rebellion of 1837-38, the invasion of Canadian territory by the Patriots in 1838 and the further invasion by the Fenians in the 1860s all claimed to liberate Canada from the overseas empire. During the period of Fenian raids a sort of secret police was created to uncover plots against British America and take action against them. Finally, the act of 1868 gave birth to the Dominion Police under the supervision of judges. In November 1860 its jurisdiction was extended to the whole Dominion of Canada with two commissioners of police for Ontario and Quebec. It is hard to estimate the size of this force. There were at least 15 men in Ottawa to protect parliament and other government buildings. How many more were in the rest of Ontario and Quebec, we don't know. The number, however, was very small. According to one source (N.W.M.P. Report 1920) the size of the Dominion Police force in 1880 was 20; it gradually increased to 150 in 1920.

When the N.W.M.P. started in 1873, 150 men arrived in Winnipeg with the manifest function of coercing the outlaws and whisky traders. It was estimated that there were 500 whisky traders in the area who had underground hideouts. A year later more men were recruited in
Toronto and on June 6, 1874, 16 officers, 201 men and 244 horses left by two trains. Occupational backgrounds of 174 sub-constables reflect the militaristic character of the force. There were 41 from regular services, 14 from the Royal Irish Constabulary and civil forces, 32 from the Canadian Artillery, 87 from the Canadian militia (Report 1874: 33).

The organizational hierarchy under the Department of the Secretary of State, constituted a Commissioner, Assistant Commissioner, Surgeons, Veterinary Surgeon, Quarter-master, Inspectors, Sub-Inspector, Constables and Sub-Constables. The force had a wide range of duties and privileges which included 'the preservation of peace, the prevention of crime and offences against the laws and ordinances in force, the apprehension of criminals and offenders, the attendance upon court officers when required, the execution of warrants and performance of all duties related thereto, the escort and conveyance of prisoners or lunatics to places of punishment or confinement, and performance of all duties assigned under the authority of the Act, with all the power, authority, protection and privileges which any constable might be clothed with under the law.' (Turner 1950: 89) Thus the N.W.M.P. was a police force under military discipline.

---

Table 1 About Here

---

The size of the force leveled off in the next three years. The total strength in 1877 was 329, and in 1881, 293. It may be recalled here that during this period American settlers, in a drive to exterminate Indians, were pushing them into Canadian territory. American Sioux Indians, about 700 in number, mixed Sioux, Angallala,
Table 1
Size of the Royal Canadian Mounted Police Force, 1876-1971

<table>
<thead>
<tr>
<th>Year</th>
<th>Size of the Force</th>
<th>Est. pop. in 000's</th>
<th>Rate/100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1876</td>
<td>325</td>
<td>4,009</td>
<td>8.10</td>
</tr>
<tr>
<td>81</td>
<td>293</td>
<td>4,324</td>
<td>6.77</td>
</tr>
<tr>
<td>86</td>
<td>1,005</td>
<td>4,580</td>
<td>21.94</td>
</tr>
<tr>
<td>91</td>
<td>1,021</td>
<td>4,833</td>
<td>21.12</td>
</tr>
<tr>
<td>96</td>
<td>741</td>
<td>5,074</td>
<td>14.60</td>
</tr>
<tr>
<td>1901</td>
<td>764</td>
<td>5,371</td>
<td>14.22</td>
</tr>
<tr>
<td>06</td>
<td>684</td>
<td>6,097</td>
<td>10.07</td>
</tr>
<tr>
<td>11</td>
<td>626</td>
<td>7,207</td>
<td>8.68</td>
</tr>
<tr>
<td>16</td>
<td>797</td>
<td>8,001</td>
<td>9.96</td>
</tr>
<tr>
<td>21</td>
<td>1,671</td>
<td>8,788</td>
<td>19.01</td>
</tr>
<tr>
<td>26</td>
<td>963</td>
<td>9,451</td>
<td>10.18</td>
</tr>
<tr>
<td>31</td>
<td>1,351</td>
<td>10,376</td>
<td>13.02</td>
</tr>
<tr>
<td>36</td>
<td>2,717</td>
<td>10,950</td>
<td>24.81</td>
</tr>
<tr>
<td>41</td>
<td>4,299</td>
<td>11,507</td>
<td>37.35</td>
</tr>
<tr>
<td>46</td>
<td>3,585</td>
<td>12,292</td>
<td>29.16</td>
</tr>
<tr>
<td>51</td>
<td>4,985</td>
<td>14,009</td>
<td>35.58</td>
</tr>
<tr>
<td>56</td>
<td>6,324</td>
<td>16,081</td>
<td>39.32</td>
</tr>
<tr>
<td>61</td>
<td>7,896</td>
<td>18,238</td>
<td>43.29</td>
</tr>
<tr>
<td>66</td>
<td>7,920</td>
<td>20,014</td>
<td>39.57</td>
</tr>
<tr>
<td>1971</td>
<td>9,917</td>
<td>21,568</td>
<td>45.98</td>
</tr>
</tbody>
</table>

Sources:
1) North West Mounted Police Reports 1876-1930 and Royal Canadian Mounted Police Reports 1931-
Minnecougoos, Uncapapa, Blackfeet, Saw Jac, and Two-Kettles numbering 500 men, 1000 women, 1,400 children, 3,500 horses crossed borders (Report 1876). The N.W.M.P. had a tactical alliance with Blackfeet and used other means such as mitigating the sentences of Assiniboine Indian young men in gaol in an effort to persuade them to conform to the Queen's law. The Assistant Commissioner's letter (Report 1877, Appendix F: 53) is an example of how well he thought the force was doing of taming the Indian. The native population was under strict surveillance. The frequency with which Indian names appear in the lists of criminal cases tried during the early years shows a high rate of apprehension of persons of Indian origin. The number of criminal cases handled by the force was small; the most frequent offenses appear to be theft of horses, bringing intoxicating liquor, firing, assault, and using firearms in threatening manner.

After 1885, a complete line of outposts was established, and the system of patrol began. This reduced smuggling and horse stealing. The next five years are again characterized by a generalized feeling of remarkable absence of crime, especially serious crime. Until 1905 the N.W. Territories were administered by the department of justice. When Laurier's government carved out Alberta and Saskatchewan the administrative responsibility was given to provincial Attorneys General. During 1916-1918 the policing of the provinces was withdrawn, but in 1918 the jurisdiction of the force was extended to include the whole of Western Canada. At this point the authorized strength was fixed at 1,200 men which in the following year was increased to 2,500. The duties of the force were defined to include:
a. The enforcement of Federal Laws
b. The patrolling and protection of the international boundary line
c. The enforcement of all orders of Council passed under the War Measures Act, for protection of public safety
d. Generally to aid and assist civil power in preservation of law and order whenever the government of Canada may direct.

By the Act of November, 1919 the force was called the Royal Canadian Mounted Police. The act provided for the absorption of the Dominion Police.

By 1921 the force was handling 8,235 investigative cases per year in addition to violations of Criminal Code and Federal Statutes. During this period, however, the size of the force did not increase; consequently the number of cases per force increased significantly: from 7 in 1920 to 34 in 1926. Offenses against persons in general and homicide in particular were high in 1929. The total number of cases (81,735) as well as criminal code offenses (9,650) were far too many as compared with the figures of previous years, and the overall reported crime remained high, though it went down in the thirties.

Municipal Policing in Canada

In Canada, by far the most important agencies of administration of law and order were municipal police forces of Canada. During the years of French rule (1600-1760) there were no local governments; when the British took over, the military played an important role in governing the country. (Crawford 1954: 20) From 1764, the Courts of Quarter Session were the major administrative bodies which controlled
almost all municipal affairs. The members of the Courts of Quarter Session also constituted a judicial body which tried various types of minor offences and assumed full power to govern cities and town. There were instances where municipalities were allowed to elect some officers (baillis and sous baillis) to look after highways and bridges, and act as constables. However, constables were generally appointed by the Court of Quarter Sessions, and parishes were controlled through militia to 1841. (Crawford 1954: 31) The policing powers of the courts of Quarter Sessions were rather vaguely and generally defined, but they were authorized to make order and regulation to administer cities and towns.

In the late eighteenth century immigration tremendously increased when thousands of loyalists moved to Canada; about 10,000 settled in Ontario. During the first half of the nineteenth century upper Canada experienced as high as a 10-11 percent increase in some years.

The increase in population was followed by and then accompanied the growth of urban centers, creating a need for expedient government structure. The multifarious problems of cities further multiplied. The Courts of Quarter Session though enjoying increased powers to manage city affairs were becoming incapable to cope with the situation for the same reason. Courts of Quarter Session not only failed to handle everyday problems of the towns and cities but also exhibited indifference and lack of understanding of local needs thereby creating distrust and dissatisfaction among the people.

"A body of public officers with such large and unrestricted powers would not be considered somewhat dangerous, even if its members were annually subject to popular election. But the magistrate who
exercised these enormous powers in Quarter Sessions were life appointees of the Government, and often had very meagre qualifications for public office. Many of them were old army officers, and most of them men of sufficient income to render them indifferent to the hardships and wants of the average hard working settler." (McEvoy, "The Ontario Township" in Crawford 1954: 27)

The growing complexities of urban affairs and increasing demand for efficient city and town administration were among the factors which lead to the creating of full-time urban police forces. The beginning of city policing can be traced back to the existence of police towns of York, Sandwich and Amherstburg in 1817, and Niagara in 1819. (Aitchison 1953: 553). The police town meant a town having police establishment by law. (Aitchison 1953: 553).

Policing was quite welcome in the 1830's, and preferred over corporations. That sentiment is expressed in the following quote from a resident of York in 1829.

"The police system of this town is infamous to a certainty, but corrupt and deficient as it is, it is still preferable to a Corporation chiefly composed of, and directed by the reptile band of officials of Little York." (Aitchison 1953: 580)

But nevertheless the writer goes on to suggest:

"Let the inhabitants go to work and insist on an amendment in the present police law, let them call a public meeting, and get up a petition to the Legislature praying for an act to authorize them to elect, by ballot, the whole of their police
officers annually, and let them suggest to the Legislature such other improvements in the present system as the experience of many years has shown to be necessary." (Aitchison 1953: 580)

The formation of a Board of Police in Brockville in 1832 marked the beginning of separation of policing power from the Courts of Quarter Session. By 1837 the Board of Police were established in eight cities in Upper Canada, Hamilton (1833), Cornwall, Port Hope, Prescott, and Belleville (1834), Coburg and Picton (1837). (Crawford 1954: 28) The power of the Brockville Act exemplifies the power granted to these boards with slight variations.¹

**Policing and Recorded Crime**

Before 1876 records about crime statistics are fragmentary and scattered.² It is very difficult to estimate even roughly the extent of criminality in pre-confederation Canada. One can get some idea about the extent of criminality reading anecdotal accounts and complaints about social conditions and social life in Canada. (Clark 1965; Elliot 1930; Guillet 1933). But it is very difficult to make generalizations on the basis of these accounts.

Writing around 1851 one author notes:

"Serious criminal offenses, especially against property may be said to be comparatively rare in Canada. The large amount of material comfort afforded to the wide-spread population of the colony, with exceptions, mostly in large towns, allows, of course, fewer temptations to commit offences against property than among
the over dense and too frequently starving masses of the parent country."

(J.B. Brown, Views of Canada and the Colonists in Clark 1942: 240).

It can be argued that rural communities offered very little to thieves and burglars. Their movable property was useless and not worth the efforts involved in stealing, and their assets (land) could not be stolen.

A few years earlier (in 1846) pointing out a large number of persons in Kingston Penitentiary (520) when the population of Upper Canada was very small another author wrote:

"It will surprise my readers to state that in an agricultural country where the manners of people are still very primitive, where education is still backward, and civilization slowly advancing, out of a population of 1,200,000, scattered in the woods, there should be so large a proportion as twenty women, and five hundred men, in the Kingston Penitentiary..."

(R.H. Bunnycastle in Clark 1942).

He then cites the instances of crime in cities like Montreal, Kingston, and Toronto suggesting a high occurrence of crime in cities. A few years later, the Preliminary Report of the Board of Inspectors of Asylum, Prison etc., (1859) further substantiated the belief that there was high incidence of criminality in cities. Having pointed out that a number of towns in lower and upper Canada did not send a single convict to the penitentiary, indicating an absence of serious crime in those places, the report goes on to say:
"As a melancholy reverse to this picture, take the following cities and environs which seem to monopolize great crimes: Hamilton has sent 35 convicts, Toronto 34, and Montreal 26, to the Penitentiary." (Sessional Papers of the Province of Canada, 1960, in Clark 1942).

The above Report also gives some number of convicts in the Provincial Penitentiary from 1836 to 1859 comparing Canada West and Canada East (meaning upper and lower Canada). Figures for Canada West are significantly higher (194,179, 238,226 for the years from 1856 to 1859) than those for Canada East for the same years (80, 49, 67, 30). It was pointed out that high incidence of crime in upper Canada was partly due to high rate of increase in population and partly due to habits of drinking. On the basis of the kind of information reported above it can be cautiously inferred that the incidence of criminality was quite high. However, it is hard to establish the extent of various types of crimes.

The lack of available statistics on crime for the early period and for different types of communities restricts our analysis to the late 19th century and to national level trends. We have selected two kinds of indicators to examine the trends in criminality. First, the number and rate of all convictions (indictable and nonindictable) covering the period of 1876 to 1921; second, the number and roles of conviction for all indictable offences, to see if there appears any significant difference in the trends when nonindictable offences are excluded. The second set of data cover the period between 1886-1921. In both sets we have examined four categories of crimes, namely, offences against the person, offences against property with violence, offences against property without violence, and total of 'all offenses.'
The rates of conviction for the type 'all offences' registered a visible decline during the first decade (1876-1887), a slow rise till the turn of the century, and a steep increase after 1902. The rates of conviction for "offences against property without violence" show a trend very similar to the one shown by "all offences," that is, an overall slow decline to 1887, a slow increase turning into a steeper slope after 1900. The conviction rates for offences against the person can be described in the same fashion, but offences against property with violence do not exhibit a trend comparable to the other types of offences.

Let us turn our attention to the statistics on convictions for the second category of data (indictable offences only).

Very likely the indictable offences of various types, especially offences against property without violence registered a decline before 1887 which continued during 1886 and 1887. But we cannot definitely say so in the absence of this type of information for the years 1876-1885. Since 1887 the rates of convictions for offences against property without violence and against the person show a slow increase, becoming faster after 1900 than before. The rates of convictions for indictable offences also exhibit a slow increase during the same period. These increases in the various types of indictable offences are in turn reflected in the comparable manner in the trend for 'all indictable offences.'
When we look at the trend in conviction rates for various types of indictable offences beyond 1921, it is observed that both types of offences against property (with and without violence) gradually increased to 1931, registering relatively very high rates from 1926 to 1931, and showing a downward trend after 1931, which is reversed near the 1950's. These trends do not neatly match with our finding about other societies studied here and our previous research.

Another point which may be recorded here is this: the percentage of convictions is for offenses against property without violence, which gradually declined from 60 to 64% of the total indictable crimes in the early period to about 36% in the 1940's. Other categories of criminality were increasing at a much faster rate than property crimes. Offenses against property with violence increase from 7.6 percent to 13.5 percent in the 1920's; they stabilized at 12-13% in 1940's. The biggest increase in percentage was registered in "other offenses" from a low of around 4% in the 1890's. The percentage increased to 30 to 36 in the 1940's.

This is an interesting observation from two angles. First, it suggests that law enforcement agencies are busy taking care of all types of other offenses while offenses against property are also increasing. Second, it draws our attention to the fact that the increase in total criminal offenses does not necessarily reflect a true increase in criminality; new definitions and shifts in the range of behavior against which law enforcement agencies are empowered to act are continuously being made.
Policing and the Visibility of Canadian Crime

On the face of it, Canada is not an encouraging case for our argument. The shortage of evidence on nineteenth-century policing and criminality, especially before 1867, leaves many questions moot. And the long-run trend of the major criminal categories is unquestionably upward. The problem, of course, is to know whether that means a) our argument is incorrect: policing did not tend to deter property crime in Canada or b) our argument is correct, but the effects of policing on the "true" prevalence of property crime were masked by contrary effects: by the impact of policing on the visibility of crime and by the influence of the increasing availability and desirability of property on the "true" prevalence of property crime.

A few pieces of the evidence lend themselves to our argument. The anecdotal history of the Canadian frontier portrays the unpoliced areas as alive with crime. With the inauguration of federal policing in the North-west Territories, by contrast, we hear about the remarkable absence of serious crime in the police districts. Indeed, we find some indications of declines in major crimes during the first segment of the official statistics, the 1860s and 1870s. Furthermore, we find property crimes with violence rising little after 1886, and property crimes without violence rising less than most other classes of offences.

Nevertheless, if evidence for other countries, or further evidence for Canada, ran in the same direction we would have to concede defeat. On the Canadian evidence, either our argument is wrong, or our argument is unverifiable. Let us see, then, whether the same conclusion emerges from the study of the U.S., England and France.
The Pattern of Police Development in the United States

At the creation of the United States as a nation in 1776, the foundations were laid for the most decentralized policing arrangements of any sovereign state. By the early decades of the nineteenth century, it was established that policing would be a matter for local authorities: state governors ceded some of the rights of their colonial predecessors to wield police power to the municipalities, from where it was further devolved to city alderman at the ward level. Male suffrage came early in the United States, and for some decades voters had a direct say in who would be their police officials. This localized and democratic pattern for establishing police authorities was followed as the frontier moved west, years after the original pattern ceased to exist in the eastern cities. In contrast to Canada, where government in the form of the Northwest Mounted Police, often preceded settlement, in the United States, settlement preceded government. On the frontier, disputes over who should maintain what sort of order were frequent and vigilante committees challenged the elected officials (see Brown 1969). But neither the state nor the Federal governments intervened in these clashes. The criminal justice system of the United States, though ultimately the creature of a Federal constitution, and answerable to Federal power and judicial overview, began on a basis of localized accountability. The major consequence of this pattern, of legendary knowledge, is that public police officials were closely connected to the political life in their communities. Professionalism had to contend with politicization.

There is another consequence of some importance to the present analysis. A decentralized police system provided no central concern
with uniform police practices, and no one repository of information about crime across the society. At the present stage of research into the nineteenth century American police, the student must examine discrete police units at Federal, State, County or Municipal level. The most readily accessible data derive from the cities where continuous records were maintained—though all do not survive—after the establishment of the police departments around the middle of the century. These records are used to test the thesis of this paper. But it is possible nevertheless to sketch the broad outlines of development for each of the other police types.

Though in the beginning police power was a large matter for small units of government, and a small concern of larger jurisdictions, the trend in the United States was for higher levels of government to assume a greater police role. But the lesser units have not gone out of the policing business; all have grown, differentially. Centralization has had significant limits in the United States, and the trend proceeded very slowly in the nineteenth century. The early reluctance of powerful Americans to have State and Federal governments undertake police work led to a major deviation in the United States from the police development pattern elsewhere. This was the emergence and vigorous growth of private police agencies. By the end of the nineteenth century they were numerically a close second to the public police departments in the cities, but they dominated in many of the counties. Some private police work of the nineteenth century came to be tackled by State and Federal governments in the twentieth century. We will trace this development presently. The more general point to be made first is that in the United States, unlike other
equally capitalist nations with different political structures, police power and protection was not only decentralized to small polities, but localized directly to wealthy individuals and corporate groups.

Federal and state police power in the nineteenth century was seldom directed at everyday crime. Mostly it was exercised by military and militia units as a backstop in civil disturbances and against the Indians; it was used frequently in the South during reconstruction, and in the North and West for industrial strikes and race riots later in the century. Our concern here is with policing and ordinary crime, so we will just briefly consider policing by the larger units of government, and then say more about the two dominant police forms: the private agencies and the municipal police departments.

Federal Police

In the 19th century several small special-purpose police units were established by the Federal Government to enforce and protect Congressional fiscal operations and the mail; a large part of the effort went into internal surveillance of officials. Policing the operations of large organizations turned out to be a significant task in the nineteenth century, since adequate accounting systems had not yet been developed. Policing was often undertaken by private police for governments at all levels, and extensively for big firms such as railroads. The Federal government used both its own forces, and private agencies on contract.

The Treasury Department set up four units before 1900. The Revenue Cutter Service, which became the Coast Guard in 1915, was organized in 1789 and grew steadily; by the end of the century it had seventy agents in an Intelligence Division. The Customs Agency Service,
which was established in 1846 to investigate customs officials consisted of 90 agents by 1900. After the Civil War, the Secret Service and the Bureau of Internal Revenue were added to Treasury. The former was a multi-purpose detective organization which dealt initially with counterfeiting but soon was used by various government departments. The modern role of protecting the President was not assumed until 1902, after the assassination of President McKinley. Then the force was still fewer than one hundred agents. The Bureau of Internal Revenue began to employ agents to deal with frauds and evasions only after Federal taxes were again levied in 1861. There were twenty-five agents at the end of the 1860's and not more than one hundred by 1900.

The Post Office was the other Federal Department employing police. A Special Branch was set up in 1840, with thirty-three agents in 1865, ninety in 1880 and more than one hundred two decades later. Federal Marshals were important along the frontier in the nineteenth century, but we have no information about their numbers. The job was often part of a political rather than a police career and for that reason we are not treating it as part of the professionalizing police. All other police units of the Federal government are twentieth century creations. The Federal Bureau of Investigation for example, was begun in 1909—with six agents!

State Police

Most police organizations at this level were also largely begun in the early decades of this century. They emerged in the heavily industrialized areas of the northeast: Connecticut in 1904, Pennsylvania in 1905, New York, Michigan, New Jersey, West Virginia
and others in 1917. These police departments represented a slow and partial response of authorities to the dismal failures of various forms of private police and the state militia (both working solely for management), and of ineffectual county officials, to maintain an equitable order in the factory towns. Though state police were extensively used in industrial disputes, the bulk of their day-to-day work dealt with crime.

There had been public pressure in many states to expand the police role of the state governments from the middle of the nineteenth century, most often initiated by a rural-based party in the state legislature challenging its opposition which had control in the cities. Police power had been granted to the cities earlier in the century, but it could always be taken back. For two or three decades in states with sizable cities, the "farmer" representatives won out: city police departments were made accountable to state-appointed Boards of Police Commissioners. But this development neither much affected the nature of city police work, nor did it lead to additional public policing outside the cities, except in New England.

Separate state police organizations were established in Texas, Maine, New Hampshire and Massachusetts. The Texas Rangers, which grew out of vigilante groups of settlers acting against Indians and Mexicans, had a checkered but continuous life from 1835, numbering 140 men at one time but down to eighty in 1901. The New England state constabularies were smaller and different in initial purpose. Massachusetts, the largest, came to life in 1870 to enforce state liquor laws and some regulations governing health and safety conditions in factories. But all increasingly engaged in criminal work. In 1891, for example,
Massachusetts employed twenty-five factory inspectors and twelve detectives, the latter made less than five hundred arrests across the state for a wide range of standard criminal offenses.

County Police

The old English offices of Sheriff and Constable continued in the United States. They were the central police roles of the counties in the nineteenth century. Each was used for both civil and criminal work, and paid for largely on a fee-for-service basis. The Sheriff possessed the power to command the "posse comitas", that is, to call to his assistance citizens over the age of fifteen years. He could deputize these citizens with police power—an important mechanism for creating private police. It is unlikely that many county sheriffs in the nineteenth century could be considered professional police, in the sense in which that term is used here. Under a fee system, the civil work was both more time-consuming and profitable than the criminal. Further, the office of sheriff being elective, it was often a temporary (and on occasion, lucrative) stopover in a political career.

If we accept that the counties provided no professional police in the nineteenth century, that the Federal and State governments accounted for at most six hundred police professionals operating in limited jurisdictions, then policing the sixty-three million Americans who existed in 1900, was a task for the city and the private police. The city departments were also restricted to operate in their communities of accountability. Most of the "criminal space" in between was handled by the private agencies. But first, the municipalities.
The old American cities on the eastern seaboard had had a citizen night watch since colonial times. They also had sheriffs and constables who constituted the day police, working from courts for fees. Watchmen had at first been drafted, or took their turn, and were unpaid. By 1800 they were paid on a nightly basis, though a tour of duty varied across cities from a few weeks to one year. Watchmen were entitled to earn fees for arrests made, but few chose to leave their trades in order to appear at court. The watch system, increasingly ineffective for the frequent early nineteenth century kinds of disorder—especially property crimes and riots—yet increasingly costly to the taxpayer, continued in the East until police departments, at first called day and night watch, were established.

In the United States, the model of the London Metropolitan Police was an organizational invention, early discussed after 1829, and available for dissemination when the political and administrative conditions were right. Philadelphia tried a short-lived experiment with the form in the 1830's, paid for by a city benefactor. But the model, much modified, was first laid out in New York in 1845. Other cities, of greatly different size and composition, followed in the 1850's, consolidating a distinctive American institution.

The new pattern incorporated at least two important features of the nineteenth-century watch system. The first is the systematic deployment of watchmen across the city space, often from ward-located watch-houses. Though centrally directed for some kinds of incidents under a Captain of the Watch, or equivalent, the watch was based in wards. As new wards were founded, men living in those districts were
added to the watch. The second feature of the watch which found its way into the police departments was the localized political accountability. Broadly speaking nineteenth century watchmen were appointed by, and made accountable to, the city councilmen elected from the wards. The new police departments were made accountable to the Mayor who was legally responsible for appointments. But in fact he acted on suggestions of the wardmen who most often recommended on the basis of patronage. Thus the police officials in the cities were highly politicized from the outset.

The citizen watch then, provided one progenitor of professional police in the United States. What of the others? The office of Sheriff continued in the county where a city was located, but became of decreasing importance to criminal work. This was assumed during the watch era by constables; in some cities, criminal work fell to Marshals and, simply, Day Police. We shall refer to the constable role, meaning any of these. It will be recalled that these officials worked primarily for fees paid at court for civil and criminal work—writs delivered, witnesses gathered, arrests made and the like. Two developments combined, as the cities grew, to make the constables into entrepreneurial and professional police officials. First, possible remuneration for the work increased considerably, not only from fees, but also from rewards offered for the recovery of stolen property. Public constables were entitled by law to receive rewards. They were also allowed to be paid for guarding a bank or for watching warehouses. The second development both follows from the first and arises from the decentralization of the political system. The constables became diffusely accountable. The degree of diffuseness
of political control over constables, varied from city to city. That is to say, the number of official and other citizens who had some voice in the appointment, supervision and payment of constables was larger in some cities than in others. Centralized co-ordination of the work also varied; it was never very strong. But in all cities, as the century advanced, the constable both worked for more public officials than previously—mayor, alderman, high constable, city attorney, police court and other judges—and could be hired by, or could respond to reward offers from, a growing number of banks, firms and individuals who wanted property protected or recovered. Under these conditions, incumbents of the constable role tended to stay on the job—a career was possible and thus the role was professionalized—and to compete among each other for information about crime and remuneration.

The new police departments centralized all police officials, watchmen and constables, into the one organization, and made rules to prevent members from receiving outside remuneration. Thus, in law at least, they ended the entrepreneurial aspect of the public police role. Criticism of the constables had mounted during the 1830's and 1840's as people saw and felt the inequities of the entrepreneurial system. It was alleged, among other things: that people were unfairly arrested for the sake of fees; that deals were made with thieves for the rewards on recovering stolen property and the thieves allowed to go free because the reward was much more than the fee for making an arrest; and that constables, absorbed in private work, did not attend efficiently to important public protection work such as at riots and fires. An early attempt to ensure more public work by the constables,
to pay them a minimal salary, had not been effective. And there were other kinds of disorder which people with power wanted attended to—control of immigrants and their habits being among them. Neither the night watch nor the constables were sufficient to meet the demands of these changing definitions of order.

At the same time, appropriate administrative and political organization conditions were increasingly available such that centralized control over the police was possible. Administratively there was an increase in the power and stature of the mayor's role, relative to other officials. A kind of executive centralization arose from concerns about the control and accountability of finance. Politically, party organizations both mobilized the voters and arranged for the disposition of patronage more consistently. It was political parties in office, which created the first police departments.

It is a sociological truism that new forms of organization are built from old ones. Just as some features of the watch continued in the departments, entrepreneurial policing did not fade away. Instead, private enterprise policing was re-organized, with continuing connections with the public police. One of these connections greatly contributed to the possibility of sustained police careers under unstable political conditions. Many public policemen, when dropped from a department with political changes, took up employment in a private agency, later returning to public work. The city police recruited between 5% and 10% from the agencies.

Private Police

It will be seen by an advertisement in today's paper that Mr. McDonough, late captain of the city guard, and
Mr. Du Breuil, late first lieutenant in the same, have established an independent police. They have been constituted deputies by a legal officer, and have qualified according to the requirements of law, and are, therefore, fully authorized to act as peace officers, and to execute any process issued in any criminal case. Of course they will receive no salary, and their compensation will often depend on what those who choose to employ them shall think proper. This kind of police has been tried in all of the Eastern cities .... and has been found to be much more efficient than that of the regularly appointed officers.

St. Louis June 5, 1846

Here is the prototypical account of the origins of the private police agencies. The mechanism of legitimation is the deputization of a citizen by a suitable official. This is a public police power, but it will be available for private purposes. The agent has previously established himself in a public police role. The claim is made that for those who can afford them the private police will be more efficient than the politicized public organizations.

After the city police departments were established, private police had to be licensed. However, the warrants were issued by different officials in different places--the Chief of Police, Police Commissioners, the Mayor, the Governor, and of course the ubiquitous county Sheriff--and limited records of these appointments appear to have survived. We have used the following fragmentary data to indicate
trends in the growth of private police in the cities. 1) Records of watchmen licensed and private agencies for which warrants were issued. 2) United States Senate investigations into private police in 1893, the Homestead Inquiry, (U.S. Senate 1883). 3) Some incomplete records of the largest private police firm, Pinkertons National Police Agency (see Pinkerton files, Library of Congress).

McDonough and Du Briel operated in St. Louis from 1846 to 1861 when McDonough was made Chief of Police in the newly organized police department. The firm may have had a monopoly on detective work during the years of entrepreneurial public policing in St. Louis, which ended when the department was established. We have found no record of long-lived agencies in the "Eastern cities" referred to in the newspaper editorial. Agencies probably could not survive until they were assured of some regular source of income. This was provided first by the larger railroad companies. Such was the case for two agencies established in Chicago in the 1850's. Allan Pinkerton, a former deputy Sheriff of Cook County, began his firm in 1852 with contracts for regular work. Up to this time private police were sought by property owners or occupiers, and payment was often based on successful results. The agencies sought work by advertising and negotiated contracts based on standardized per diem rates, regardless of success. By the end of the 1860's Pinkerton had branches of his agency in six cities, all added in that decade. Though the firm grew in numbers, no new branches were established until the 1890's when four more were begun, making ten in all by 1900 with about 800 permanent staff. Greatest expansion occurred
in the next decade, with twenty-five branches by 1910, two of which were in the Canadian cities of Montreal and Toronto.

This trend is seen to be paralleled when we examine the number of guards and detectives licensed in three cities; Boston, St. Louis and San Francisco, and the number of private police agencies advertised in Denver. Growth was steady but unspectacular during the latter half of the nineteenth century; the major fluctuations reflected special events such as railroad strikes. (There was one in Boston in 1879: 218 agents were appointed as railroad police that year, as compared with only 42 the following year.) In the 1880s and 1890s, the numbers of private police licensed were equivalent to 10% to 30% of the entire police department. Denver had two private agencies in 1881, four by 1890 and five during the following decade. The big jump in private police numbers occurred around 1910: in Boston and San Francisco from 40% to over 60% of police department size in about five years; in Denver from five agencies to nine. St. Louis recorded a temporary increase to 75% of police department size in 1904-05 for a world exposition held there in those years, although this level did not persist through 1910. The figures for private police licensed by police departments underestimate the totals, as table 2 indicates. The later nineteenth century, therefore, brought a substantial increase—both relatively and absolutely—in private police forces.

Four main kinds of private police force are discernible through the nineteenth century:

1. Guard and protection work. It consisted of patrolling private and public premises, including docks and railroads, or
-43-

watching and taking tickets at large public events such as races, circuses, fairs and expositions.

2. Detective investigation. Before the Civil War this was concerned principally with robbery, counterfeiting and runaway slaves; after the war, crimes against carriers and banks expanded.

3. Surveillance of employees. The early work of this type in 1850s and 1860s was the single most important source of regular employment for private agencies, especially in the investigation of embezzlement by employees of railroads. Many large organizations had weak accounting systems. Labor unrest after the Civil War led to undercover surveillance of workers in order to break up union activity and discredit strikes. The most celebrated early case, the Pinkertons' investigation of the Molly Maguires in the Pennsylvania coalfields during the early 1870s, is widely considered to have given great impetus to this kind of work.

4. Strike-breaking guard work. Typically this was associated with undercover surveillance from the 1860's. Pinkertons testified at the Homestead Inquiry that they first undertook this work in 1866 and again in 1868 and 1874. From that time through 1892 they had "been employed to protect private property in connection with seventy strikes--a small percentage of the total strikes in the United States in that period." (U.S. Senate 1893). Though Pinkerton tried to give a contrary impression, most of the men were recruited for strike work on a temporary basis, or drawn briefly from routine guard and protection work.
Table 2

Police in the United States, 1900-1950 (in 000's)

<table>
<thead>
<tr>
<th>Year</th>
<th>Guards, watchmen and doorkeepers</th>
<th>Policemen and Detectives - Government</th>
<th>Policemen and Detectives - Private</th>
<th>Marshals and Constables</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>78</td>
<td>135</td>
<td>68</td>
<td>9</td>
<td>116</td>
</tr>
<tr>
<td>1910</td>
<td>116</td>
<td></td>
<td>94</td>
<td>7</td>
<td>155</td>
</tr>
<tr>
<td>1920</td>
<td>148</td>
<td></td>
<td>145</td>
<td>9</td>
<td>217</td>
</tr>
<tr>
<td>1930</td>
<td>216</td>
<td></td>
<td></td>
<td>9</td>
<td>302</td>
</tr>
<tr>
<td>1940</td>
<td>255</td>
<td></td>
<td></td>
<td>9</td>
<td>381</td>
</tr>
<tr>
<td>1950</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>459</td>
</tr>
</tbody>
</table>

Source: Series D 123-572 Detailed Occupation of the Economically Active Population, 1900-1950
Although subsequent analysis may show that the growth of private police is associated with a growing frequency of labor strikes during the late nineteenth and early twentieth century, the evidence in hand suggests that the bulk of private police in the cities was routinely engaged in the protection and recovery of property. Pinkertons, for example, had 150 people regularly employed in its Chicago branch in 1893; 100 were engaged in guard and protection work (though some had gone to Homestead Pennsylvania the year before) and 50 on detective investigation and labor surveillance work. Information from the census indicates also that in 1910, private guards, watchmen and doorkeepers provide a substantial addition to the police forces charged with the protection of property. The figures in Table 1 further show that the numbers of private police licensed by the police departments considerably understate the extent to which the public officials are supported by private guards of property. As we shall see below in most of the cities examined the parallel growth of private police forces accompanies a decline in the rates of arrests for property offenses. Though we shall not examine this association as closely as that between property arrest rates and the growth of the public police, the development of private police is clearly important.

---

The Growth of Policing and Arrest Rates in Nine U.S. Cities

The nine cities are a fair cross-section of the main urban areas in the nineteenth century. Four grew from colonial ports on the eastern seaboard: Boston, New York, Philadelphia and Charleston. The latter, in contrast to the others, had a large slave population and grew very
slowly in the 1900's. New Orleans, also a southern slave town, had a larger and more diverse white population at the outset, expanding rapidly before the Civil War and more slowly thereafter. St. Louis and Chicago were two important and ethnically diverse mid-western centers of transport and industry after mid-century, the latter becoming second in size to New York by 1900. St. Louis had a slave population, and developed a watch. Chicago, San Francisco, and Denver, never had a citizen watch tradition; they began with entrepreneurial public police. In the 1850's in San Francisco, a famous vigilante committee usurped the police powers of the elected officials during the entrepreneurial phase. In Denver too, a vigilante committee emerged in 1870 prior to a centralized police department.

Except in the case of Boston, information about the number of police officials and arrests is available only after the police departments are established. Furthermore, the information is not continuous. For the purposes of a larger study, Levett has coded total arrests into the following categories:

1. offenses against property
2. offenses against persons
3. offenses against the police
4. offenses against public order
   a. on views
   b. vice
   c. domestic
   d. for other agencies
   e. miscellaneous
Here we shall abstract information on just two of these categories: offenses against property and on-views. The reason for including the on-views will become more apparent as we proceed; essentially it is to contrast the two main types of police mobilization. For property arrests the police are usually mobilized by citizens seeking help; in the case of on-views the policeman saw the offense and made the arrest without citizen mobilization.

The property arrests include both serious ones (burglary, robbery, receiving stolen goods, embezzlement, counterfeiting) and the less serious (shoplifting, petit larceny, malicious mischief). The police recorders did not distinguish between felony and misdemeanor. Some kinds of infrequent offenses against property were not included: principally, pickpocketing (coded on-view) and certain infractions of municipal ordinances such as false weights and measures.

We assume that the property arrests which have been so coded, came about after citizens mobilized the police. In other words, the volume of property crime which came to the attention of the police was not defined as a result of police discretion or initiative, but because of citizen calls for help. The centralized police department, with patrolmen deployed systematically throughout the city space, increased the availability of police assistance. Apart from directly approaching a policeman on his beat, or going to the station house to report a crime, (both common in the nineteenth century), rattles and bells were sometimes used by citizens in the early decades. By the 1860's, city departments had a station-to-station telegraph, and uniforms to help identify the patrolmen. A telephone service with call-boxes located on city streets was begun in the 1890's.
The category on-view arrests, a current police term, captures those offenses likely to have been personally observed by the officer who then decided to make an arrest. The nineteenth century patrolman typically walked along the city streets and was thus in a position to see more infractions of laws than his contemporary counterpart who drives in an automobile. In our nine cities during the 1900's, on-view arrests comprised between 50% and 80% of the total arrests. In contrast, a 1966 observational study of police patrol work in three American cities reports that just 13% of the incidents counted were on-views (Black 1968, Reiss 1971). The difference between police work in the two eras is also due to another kind of technology, the telephone. Today in the United States, most patrol work arises at the bidding of citizens who telephone for help and thereby mobilize the police. Therefore the bulk of contemporary police work is citizen-initiated; for that reason it is called reactive policing. In contrast, arrest volume in the nineteenth century made up largely of on-views, resulted primarily from proactive policing.

On-view arrests, then and now, are typically for more trivial offenses which occur in public places. Our data consist of four kinds of offenses coded as on-view: Drunkenness (by far the most frequent source of arrest volume); Disorderly Behavior (e.g. breach of the peace, brawling, vulgar language, and the more serious but less frequent riot, mayhem and discharging of a firearm); Vagrancy (lounging and destitution); and Traffic Offenses which, of course, were very few until the 1910's. Some important but usually infrequent offenses on which the police would have observed and taken the initiative were not classified as on-views. These include: 1) offenses against the police (attacking or interfering with an officer, rescuing a prisoner
and the like which were coded separately; except in the South during reconstruction this category was always less than 1% of the total arrests); 2) some vice offenses (e.g. street-walking and violations of licensing laws). The proportion in this category varied across the cities and at different points in time. These other police-initiated arrests reflect a different impetus for proactive policing that will not be taken up here.

Let us first examine the trends for property arrests and the growth of the public police. The contrast with on-views is made in the discussion of Boston, below. Four patterns are discernible.

1. Rates for property arrests decline while relative police size increases--Boston, Chicago, San Francisco--Figure 3.

2. Property arrest rates decline while police size remains the same or declines slightly during critical decades--New York, Denver--Figure 4.

3. Property arrest rates decline and so does police size--Charleston, New Orleans--Figure 5.

4. Property arrest rates do not decline while police size increases--Philadelphia, St. Louis--Figure 6.

Over-all, there is some support for the hypothesis advanced near the beginning of this paper: in the societies under observation property crimes would increase at some early stage in the nineteenth century and then decline steadily through the remainder of the century. This is clearly the trend in three cities, Boston, New York and Denver, for which we have observations over a long enough time period. In four other cities, data became available as the decline in property crimes was occurring. But there are two cities, Philadelphia and
St. Louis, where no decline is observable. This may not constitute negative evidence for the hypothesis. It may be the result of organizational features unique to these cities, and different ways of recording property crimes, especially early in the series when the rates are unusually low.

It would seem from these American data that the trend of declining property crimes, where it exists, is not so clearly explained by an associated growth in the size of professional police. Property arrest rates come down whether police size increases or not; and at very different levels of policing: in 1880 for example, Boston with a population of 363,000 has 200 public police per 100,000, while in Chicago the police ratio is 100 and the total population is 503,000. There is however more fluctuation in the property arrest rates curve in Chicago. But police size may be a poor indication of police efficiency. Will a closer examination of police organization explain the unanticipated discrepancy?

It will be useful to sharpen our focus on the things we are assessing. Take the case of Boston for which we have the longest time-series: almost one hundred years in all. Property arrests are at 860 per 100,000 in 1824, 500 in 1850. There is then a steep rise during the next decade to the peak for the series, 1400 per 100,000 in 1860. From then on the trend is steadily down, with mainly small fluctuations, to a rate of 550 in 1920.

Now consider the efficiency of policing. In 1822 Boston was incorporated as a city with the result that more control over the police came to reside in the Mayor. A strong reformist Mayor, Josiah Quincy, was elected in 1823 and lasted in office for six years. One of his first acts was to appoint a city marshal to
coordinate police work. The person appointed (on a sizable salary for the times), Benjamin Pollard, was a vigorous man of high standing in the community. He concentrated particular attention on sanitation and health conditions but did not neglect criminal work. In 1824 the police consisted of 36 night watchmen distributed in the six wards and six constables, easy enough for one man to coordinate. Expenditure on Day Police was increased during the 1820's to ensure patrolling in certain areas. The constables were active police officials, stimulated by fees and rewards as well as by Pollard's watchful eye. At the conclusion of his term of office in 1829, Mayor Quincy "was fully satisfied with his own efforts on behalf of the police." (Lane 1967: 25)

The next two decades in Boston, never noted for the massive population increases of other cities such as New York and Chicago, saw the highest inter-censal increases of the century for that city; 52 percent in the 1830's and 47 percent in the 1840's. Later in the 1840's the city was greatly influenced by two newcomers: the railroads and the poverty-stricken Irish. These are particularly important to the thesis of this paper. The first meant more accessible and easily moved property; the second an increase in the proportion of propertyless.

The police grew steadily from 1830 to 1850 but were more and more diffusely controlled. The night watch kept pace with the population and numbered 200 in 1850. But it was considered outdated by many. There were sixteen constables and 48 general police. By this time the former were more confined to civil work at the courts. The latter were commanded by a city marshal, Francis Tukey,
appointed in 1846 and noted for policies of moral enterprise especially directed at vice, drinking, selling liquor, gambling and prostitution, in which he had the support of the Mayor and city council. The police were extremely active in a lot of non-criminal work concerning health, sanitation and alleviating the conditions of the poor. Property crimes, especially the more notorious robberies, were given much attention, to the detriment of everyday larcenies. The police were not systematically deployed to be available for the latter. Rewards, though officially proscribed since 1846, were still in fact being sought and taken. The police were also said to be involved in influencing elections. Bribery, extortion, dishonesty and graft, were widely alleged against the police, especially detectives. It may be inferred that at this time the police were less efficient about ordinary property offenses which make up the bulk of property arrest volume, than they had been in the 1820's and were to become later in the 1850's, and so property arrests were at a low point in 1850. It would be our guess however, derived from the lowered efficiency of the police, their non-systematic deployment, and the assumption that accessible and movable property was on the increase, that the rate for property offenses would not have declined, but was increasing.

A centralized police department was begun in 1854, with somewhat fewer men than the previous total of part and full-time officers. Patrolling day and night was based on neighborhood stations—not previously used by the day police—making it easier for citizens to seek help. A harbor police unit was created. New police stations were built after 1855, and connected by telegraph
in 1858. In 1857 the supervision of this force was strengthened as it grew larger, by the introduction of sergeants. That year the men were outfitted in uniforms. While there was strict enforcement of regulations against officers receiving extra rewards, some compensation was provided in protection against illness; full pay for up to ten sick days, a device which would also encourage loyalty to the organization. All the evidence points to an increasingly more efficient organization with high morale. Stable police careers were growing too. The Chief of Police was the same from 1856 to 1860; in five of the eight police divisions the same captains remained in command from 1854 until 1860.

Arrest rates during the decade show the effects of these striking increases in police efficiency and availability. In 1850 the rate for total arrests was 2,500. (See Figure 7) It rose to 3,300 in 1853. After the formation of the department, mid-1854, the total arrest rate for the year was 9,300. By 1860 the rate had gone up to 16,700. The great bulk of the total arrests were onviews: a little over half in 1853, three-quarters in 1854 and 80 percent in 1860, reflecting a growth in proactive policing, further substantiated by the information that of the 24,000 arrests in 1860, over 20,000 were of foreign-born Americans, mostly Irish. The entire police force at that time was native-born, largely from the Protestant rural areas of New England. Property arrests did not grow at such a steep rate, but more in keeping with the gradual increments in organizational efficiency and morale. Over the remainder of the series, the greatest fluctuation for all property offenses in Boston occurs after 1910, when police morale was at a very low ebb. The slump eventuated in the police strike of 1919.
Let us summarize the argument from the evidence of the Boston data.

1. Property arrests declined from 1824 to 1850.

2. Policing was efficient for the 1820's but though the numbers of police officials increased during the next two decades, their efficiency as an organization declined up to 1850 in two ways:
   a) the police were not systematically deployed among the population but concentrated in the central city where more serious property offenses were occurring. They were thus less available for citizens to utilize against what we assume were the more minor property offenses;
   b) the police consisted of both part-time and full-time officials. Command was not strongly centralized in one official and policemen, though salaried, were still operating in part for rewards from diverse sources.

3. We assume from the growth of railroads and the increase in the numbers of the propertyless, that property offenses were increasing.

4. We attribute the decline in property arrests for the period 1824-1850 to the decline in police efficiency.

5. Police efficiency was greatly increased during the 1850's by the creation of the centralized department incorporating all previous police officials on a full-time basis. They were systematically deployed throughout the population rendering them more available for citizen mobilization.

6. Arrest rates for all offenses increased more than five times in the decade, but the increase was most marked for on-views, the result of proactive policing.
7. Property arrest rates increased also but less steeply than on-views as the organization gradually settled down and as citizens faced with minor property depredations came to mobilize the police.

8. After 1860 property arrests declined steadily, with minor fluctuations, to 1920.

9. The size of the police department was increased further to 1870, kept up with population growth 1870-1890, and increased gradually thereafter. Up to the second decade of the twentieth century organizational efficiency and morale were maintained. Further during this period, 1860-1920, there was a steady increase in the number of private police.

10. We attribute the decline in property offenses, 1860-1920, to the widespread availability of an efficient police organization, and the steady growth in size of both public and private police. Thus we would argue that Boston provides clear support for the central proposition of the paper.

We will not undertake such a close analysis of police organization in the other cities, but merely note any important differences from Boston. In San Francisco and Chicago the fluctuations of property arrest rates are greater; the same is true for the growth of police, reflecting a different pattern of population increase than in Boston. Chicago, in particular, grew by leaps and bounds; there it was more difficult for police apportionments to keep pace. Police size declined relative to population from 1875 to 1885; so did arrests for property offenses. But the latter increased over the next decade as the police department expanded.
Similarly, San Francisco's greatest period of growth was the 1860s and 1870s. The police department caught up with this only towards the end of the 1870s, after which point property arrests began their steepest decline.

New York and Denver are the cities in which property arrests declined with much less increase in police size. (Figure 4) In Denver, during the 1890's, the numbers in the police department did not keep up with population growth in 1892-1900, as a state-appointed Board of Police Commissioners fought with a City Council which had to pick up the tab. The department was a political football, and so were many men within it. In one seven year period in the 1890s, there were eight different Chiefs of Police. The detectives seemed to operate independently, more as entrepreneurial police. If policing had a role in the declining property arrests, it would be due either to public detectives making fewer arrests while busy with serious property offenses, or to the presence of private police in relatively large numbers. There are indications that the agencies were strong and active in Denver at the time; no doubt they were brought primarily for labor surveillance in the Colorado mining areas nearby. Pinkertons alone had 30 regular employees in its Denver office in 1893, when the police department numbered fewer than 135. The manager had been the Pinkerton undercover agent in the Molly Maguire case. Another national agency had a well-regarded former Chief of the Denver police as its branch manager during the 1890's. In all, there were five private police agencies through most of the 1890's.

The New York Police Department expanded steadily from 1845 through the 1860's, decades of considerable population increase.
in the city (see Richardson 1970). The evidence suggests an organization of good morale and effective command structure, at its peak around the years when rates for property arrests also crested. It was a tough police instrument, tempered in many street battles, and kept sharp in that respect by many more through the remainder of the century, as strikes proliferated. The police size was high compared to other cities, and the department was well deployed, when it, like that in Denver, was squeezed down by political squabbles after 1870. But though the police force failed to keep up with population increases, it did grow absolutely over the next twenty years as the property arrests came tumbling down. Even in 1890 the police/population ratio was still higher than in any other city. It dropped in the 1890's and property rates took an upward turn. Both these trends were halted in the early 1900's. In addition, New York had a very high ratio of police per square mile of territory. (See Table 2) Many writers have referred to the early prevalence of private police in nineteenth century New York, but we have no systematic data. Pinkertons opened a New York office in 1865; by 1893 the regular employees numbered 125, a small fraction of NYPD's 3,700. Regardless of the numbers of private police in New York, the large size of the police department and its organization and deployment, may have been sufficient to respond efficiently to property offenses.

Charleston and New Orleans are extreme cases of the pattern found in New York and Denver. Police size declined steadily as property arrest rates came down steeply. (See Figure 5) The large police departments in these cities were created before the Civil
War when control of slaves was the prime concern, especially in Charleston where the black proportion of the population and the police size were over twice those of New Orleans. In the latter city, while 40 percent of the people were black, only half the blacks were slaves.

The extremely high arrest rates in these cities occurred during Reconstruction. Policemen were frequently assisted by military units stationed in the area. During these years in Charleston, up to 40 percent of those arrested were white, a proportion that was quickly turned back when Charleston and southern whites regained control of the government in 1877. Whereas the black percentage of all arrests was between 70 percent and 80 percent after 1880, it was 50 percent to 70 percent of on-views (whites were more often found drunk), and always above 90 percent of property arrests. The black arrest rates then reflected a situation where it is likely that mainly whites mobilized the police and most frequently named blacks offenders against property.

After the new governments were established in Charleston and New Orleans, both police departments were reorganized. Stable career patterns are apparent from the low staff turnover figures. But whereas these continued in New Orleans until 1900, the Charleston organization was massively shaken up between 1888 and 1892. Between 25 percent and 45 percent of the force resigned or were discharged in each of those years. The same thing occurred again around 1907, though less severely. Property arrests surged upward after each of these two disturbances in police organization. Figure 5 shows that total and on-view arrests declined on these occasions, further
evidence of a decline in organization efficiency. The New Orleans department had high resignation rates in 1902 (15 percent), 1909 (23 percent) and 1913 (17 percent), but these were mainly from the level of patrolmen; the higher command remained stable. Nevertheless property arrest rates increased markedly after 1910.

Overall, we can say that these two cities, despite unpromising first appearances, do not detract from the central thesis of this paper: changing police organization affects arrests for property crimes. In both cities the police departments were strong and large when property arrest rates were at their highest. At this time a major problem of social control was seen as the surveillance of the large slave populations: the city with the most slaves, Charleston, had the biggest police force. Police numbers were reduced because controlling slaves was no longer a problem. The New Orleans organization though not increased in size was stable internally through the remainder of the nineteenth century and property arrests declined. The Charleston department was stable up to 1888 and comparatively large. Property arrests fell during this period, but they increased over the next decade as the police organization underwent significant changes and instability.

Philadelphia and St. Louis pose a different problem for explanation: the lack of a decline in property arrests through the nineteenth century. Both these cities had a deployment problem greater than anywhere else. They had many more miles of territory to cover and thus a lower density of policemen.

TABLE 3 ABOUT HERE

The explanation for this association between police/territory ratio and property arrests is probably that with fewer police
Table 3

Size of Police Territory, Police per Square Mile and Estimated Property Arrest Rates in Five U.S. Cities, 1870 and 1880

<table>
<thead>
<tr>
<th>Territory (sq. Miles)</th>
<th>1870</th>
<th>1880</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pol. per sq. mile</td>
<td>P.A. rate</td>
</tr>
<tr>
<td>New York</td>
<td>39</td>
<td>52.56</td>
</tr>
<tr>
<td>Boston</td>
<td>30</td>
<td>16.6</td>
</tr>
<tr>
<td>Chicago</td>
<td>38</td>
<td>10.52</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>130</td>
<td>7.68</td>
</tr>
<tr>
<td>St. Louis 1870</td>
<td>18</td>
<td>16.88</td>
</tr>
<tr>
<td>1880</td>
<td>63</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Annual Police Reports of the respective cities. Comparable information not available for the other cities.
available to respond to citizen calls for help, fewer petty property offenses would have resulted in arrests. Minor offenses made up the volume in property arrests in all cities during the second half of the nineteenth century. Responding to citizen calls for help about these was not easy when police patrolled on foot and telephones were unavailable until the 1890's. If this line of thinking is correct, it may be hypothesized that there will be proportionally more serious offenses among the property arrests for St. Louis and Philadelphia. But it is not possible to test this proposition at the present stage of analyzing our data.

There are two additional organization features peculiar to Philadelphia among the cities examined: the continuation of detectives as entrepreneurial police, periodically independent of the Chief of Police, after the department was established in 1854; and the practice of police magistrates, who were in fact Aldermen elected to the justice role by Council, attending station houses daily to dispose of arrests until 1868.14

The combination suggests the existence of a situation that was described for Boston around 1850: property arrests were low because many were not recorded. Entrepreneurial detectives sought rather to recover property than arrest the offender. When the separate detective department was abolished temporarily in 1868, it was alleged as reason for the move that the detectives had been discharging prisoners from custody without the formality of going before a magistrate, i.e. registering an arrest. Problems with controlling the detectives continued to be reported through the 1880's. The unit was forever being dissolved, or "brought under firm control."
Sprogle, writing his history of the Philadelphia Police Department in 1887, describes the organizational condition. "Perhaps in no other (unit) is professional jealousy so rife as among the detectives. While this feeling may add incentive...it undoubtedly interferes with the effectiveness of the department, inasmuch as it engenders personal animosities among the men, a state of affairs which is not only destructive of discipline, but...provocative of a clashing of aims and interests." (Sprogle, p. 252) Entrepreneurial detectives would also have paid more attention to serious property offenses than to the minor ones.

Thus in St. Louis and Philadelphia also, police organization is shown to be closely related to the pattern of arrests for property offenses. In these cases the state of the organizations resulted in even fewer of the property offenses that were likely to have occurred leading to recorded arrests.

Many qualifications have now been added to the data about property arrests and police size as these fluctuated through the latter half of the nineteenth century in nine American cities. The qualifications mainly concern police organization. In general they tend to support the notion, dubious at first glance, that crimes where citizens mobilized the police were likely to be reduced to the extent that police organization was sufficiently large, available and efficient.

The Development of English Criminal Statistics

What we know of crime in England in the nineteenth century comes mainly from two sources. The first is anecdotal evidence, some in the form of tracts or reminiscences of such persons as
Patrick Colquhoun, the London magistrate and police reformer, or Percy Fitzgerald, a Bow-Street runner who published memoirs (Colquhoun 1800; Fitzgerald 1888). Much anecdotal evidence of crime, and especially of policing, is to be found in the Home Office Papers, the reports and minutes of evidence taken before Select Committees of Parliament, and in borough records. These sources help characterize criminals and criminal activity, police and changes in policing, and citizen interaction. A second, quantitative source of information about crime in nineteenth-century England consists of the criminal abstracts prepared by the Home Office. Although available since 1805, this rich source of information has been scarcely tapped by modern criminologists; it has been avoided by some primarily because of the variability in the size and duties of police forces in different parts of England and at different times in the nineteenth century (Tobias 1969). The challenge to the statistical record is based on the fact that the rapid development of the policing system had an obvious impact on the statistics. We agree and we intend to incorporate this warning into our arguments about the "visibility" of crime. There is no modern statistical record of police-citizen contacts which is not subject to precisely the same biases. (Black 1969) And with careful handling, the statistics available even for relatively early periods can be made to yield information both about policing and about actual crime rates.

The careful discussion of the development of England's criminal statistics in the nineteenth century by V. A. C. Gatrell and T. Hadden provides the basis for the exposition offered here. Clerks of the Courts of the Assize and of the Quarter Sessions of
each county were first instructed to send information regarding criminal indictments ("indictable committals to trial") to the Home Secretary in 1805. Between 1805 and 1892, when the criminal statistics achieved their modern form and comprehensiveness, three types of changes occurred which hamper over-time comparison of crime rates. First, different classification schemes for crimes were used before and after 1834. Secondly, the statistics on indictable committals for the first two thirds of the century, to 1857, do not cover all crimes charged, much less all crimes known to the police. The major omission from crimes charged consists of crimes tried at the petty sessions, courts held by one or two Justices of the Peace between sittings of the Quarter Sessions. Thirdly, the jurisdiction of the petty sessions was expanded periodically to include more crimes which were formerly triable only at the Quarter Sessions. Hence, the statistics showing the number of crimes indictable at the Assizes or Quarter Sessions (the only series to run from 1805 on) require an adjustment in nearly every decade to compensate for crimes lost to the petty sessions.

Considered in the light of these changes, the criminal statistics fall into three distinct periods or segments for purposes of observing trends over time. In the period from 1805 to 1834 there is no means of compensating for the loss of cases to the petty sessions. For example, some types of assault cases were transferred to the petty sessions in 1827 and 1828, presumably accounting for the slight dip in the criminal indictments for those years (see Appendix Table A-3).
Further in 1834, the fifty-six crime categories used in the statistical reports between 1805 and 1834 were reduced to six. Some violent property crimes such as arson or robbery were mixed with non-property crimes. A category "non-violent crimes against property" was created which included all other offenses against property. No further breakdown of the statistics in the published reports is available after 1834. For the period between 1834 and 1857 we can partially compensate for further changes in the jurisdiction of the petty sessions by using a composite of two statistical series to represent crime trends. Beginning in 1834, the number of persons imprisoned by the petty sessions each year is available. Adding this to the Quarter Sessions and Assize indictments we obtain a measure of crime which is subject to fewer aberrations due to administrative changes. In the period between 1857 and 1892, the total number of petty session trials is available for each year, and thus we can fully compensate for the changes in jurisdiction which occurred by adding petty session trials and indictable crimes together to form a single index of crime trends.

The following discussion of non-violent crimes against property will be limited as much as possible to comparisons of crime rates within each of these three periods. In the appendix to this chapter we have included tables based on Gatrell and Hadden's data showing property crime rates adjusted for each period as described above. For purposes of comparison, data for the county of Lancashire are included. Compared with the rest of England, Lancashire industrialized early, urbanized early, and organized its police force early. Its crime statistics make an interesting contrast with England as a whole.
Trends in Crime, 1805-1892

Armed with Gatrell and Hadden's data and with plenty of caveats, what can we say about non-violent crimes against property in the 19th century? For the early years of the 19th century, there is a steady upward trend in the number of indictable committals per 100,000 in the population. Over the first twenty years of the period, Lancashire runs well ahead of the country as a whole, but the pattern is the same. While the trend is clearly upward, it is far from monotonic. For England as a whole, up to the end of the Napoleonic Wars, the low point is 1808, a year of universal trade depression in England and especially in Lancashire. The high is 1805, a boom year. Following 1812, however, the trend is steadily upward. The period between 1813 and 1820 marks the steepest rise in the overall crime rate during the entire 19th century. Thereafter, the indictable crime rate slackens through the boom years 1822-24 and begins to climb again following the crisis of 1826. The year of the passing of the Reform Bill of 1832 marks the highest point in the first period.

In the second period, the movement of property crimes per 100,000 in the population is much more erratic. Contrary to one theory that crime rates were mushrooming (Morrison 1892; Radzinowicz 1966), the years 1836, 1846, and 1853 yield nearly identical rates spanning two decades. Between these years, maxima are reached most noticeably in the years of heaviest repression of Chartism, 1842, and 1848. The year 1839, another year of widespread Chartist activity, yielded a relatively low rate, apparently due to the Home Office policy of restricting use of the military to assist local magistrates in suppressing disturbances.
In the third period, the overall crime rate can only be described as dramatically declining, with some irregularity. The drop is most dramatic for property crimes but true for other crimes as well, particularly after 1870. While the statistical series for this period cannot be directly compared with those for the preceding two periods, wherever we choose to place the maximum property crime rate for the century, it must be before 1857, for the trend was certainly downward thereafter. In fact, except for the two years 1855 and 1856 for which data are missing, we can say with some assurance that recorded property crime declined steadily from before mid-century.

Let us emphasize once again that we are describing trends in recorded property crimes. We are not yet ready to maintain that this represents an actual trend, although any explanation which makes a decline in reported property crime of such length artifactual must surely be tortuous indeed.16

To explain these trends in property crime in the nineteenth century, we offered a set of factors at the outset which included both conditions leading to changes in behavior defined as criminal and conditions under which persons are likely to be apprehended and accused of crime. The set of factors which we suggest is complex and includes the behavior of the police as well as the behavior of criminals. By contrast, previous attempts to explain 19th century crime trends in England have focused almost exclusively on changes in the rate of behavior defined as criminal and have given extraordinary weight to simple economic sources of motivation to commit crimes. The article by Gatrell and Hadden on which we have relied for the data of crime rates contains an appealing version of this argument--so appealing that it is worthwhile examining
briefly their argument that the business cycle explains short term property crime fluctuations. Relying on a visual comparison of graphs of fluctuations in the business cycle\textsuperscript{17} and of fluctuations in the rate of property crime, they conclude: "the rule that nineteenth century property crime increased in depression and diminished with prosperity holds true, allowing for the occasional disjunction in the graphical correlations, and for a slight diminution in the clarity of the association in later years of the century compared with the earlier" (Gatrell and Hadden 1972: 369).

Despite suggestive visual similarities in the graphs, particularly during the trade depressions of the 1840s and 1880s, there is little correlation between the movement of crime rates and the business cycle in a statistical sense before 1834 or after 1856. For the first third of the century, between 1820 and 1834, the product-moment correlation between the two indexes is -.09. Between 1835 and 1850 the negative correlation rises to -.59.\textsuperscript{18} In 1923, Dorothy S. Thomas published the results of extensive efforts to discover correlations between social indicators, including non-violent property crimes, and the British business cycle (Thomas, 1923). Her results for the second half of the 19th century show, convincingly, no correlation, suggesting however the possible emergence of a pattern of lagged positive correlations between the business cycle and property crime rates.\textsuperscript{19}

After 1850, property crime statistics for England seem to be dominated by the overall downward trend to the end of the century. Moreover, even short term fluctuations follow strikingly different patterns after 1880. The boom year 1883 almost coincides with a peak year of property crime, 1882, and the depression of 1886 coincides with
a low property crime rate. However one interprets the shortrun pattern, the extreme variability of the statistical correlation with the business cycle (none, then negative, then positive) only underscores the argument that 19th century property crime rates were not the product of any single underlying economic motivation. They consist of a composite of trends in conditions producing a varied set of motivations to crime, opportunities for crime, and effective sanctions for crime.

Changes in British Policing, 1800-1900

A partial explanation of change in 19th century crime rates is the development of more effective police. If we define police as full-time governmental employees charged with the responsibility for enforcing the law, then England had few in 1800. England, like most European countries was policed largely by part-time, unpaid constables, employed or appointed by local government. Private companies or individuals employed police as well, since the police provided by local government were seldom adequate. It is extremely difficult to list the total number of these police. Policing was in large part the responsibility of private citizens who were liable to be appointed or elected (by the court leet or overseers of the poor) to serve as constables for one year in some places; it was on them that the onus of arrests and criminal prosecutions rested if the sanctions of the criminal law were to be brought to bear.

Full-time, paid policing was a luxury enjoyed mainly by London which, through the efforts of Henry Fielding, acquired a paid magistrate at the Bow-Street police office and a staff of full-time constables under his jurisdiction in 1750 (Critchely 1967: 32). The Bow-Street magistrates (and eventually the other London magistrates) were answerable directly to
the Home Office. The rest of England successfully resisted such centralization and nationalization of its police. But while London enjoyed the advantages of paid magistrates and the Bow-Street officers, this advantage was not widely distributed. The metropolitan area about London was actually a bewildering variety of separate local governmental units, each with its separate responsibility for policing within its boundaries. Policing authorities from one jurisdiction were not empowered, much less inclined, to enter other jurisdictions in pursuit of criminals or to assist other constables or police.

Outside London, boroughs frequently had some form of police. The emphasis was on providing a night watch, however, and not on patrolling by day. Most boroughs had laughably inadequate police forces. Bristol had twelve policemen for a population of 59,000 in 1831. Kidderminster (population 14,000 in 1831) had two constables appointed for one year terms. Leeds had five total day police for a population of over 123,000 (Somers-Vine 1879: 185-191).

Outside the boroughs, policing was carried out, if at all, largely by the parish constable. Parish constables usually served without pay; in practice they were non-professional and appointed by the Justices of the Peace for the county for a term, usually, of one year. In many Parishes (or townships in the north), constables failed to be appointed. The number of constables was always small. For example, in 1800 Manchester, with a population above 70,000 had one deputy constable with four assistants; by 1830, with Manchester's population at more than 187,000, the number of assistants had increased to 11.

Prior to the establishment of paid, full-time police, policing relied on citizen self-help and the profit motive provided by the
practice of granting rewards for informing against criminals. Citizens were free to form societies to share the burden of costs of prosecutions and the expense of hiring private police. After one of the first inquiries into the state of private policing in England, the Constabulary Commission of 1836 reported that over 500 private societies for the prosecution of felons existed in England, many of which employed private police. It was common, moreover, for commercial enterprise (particularly those which were large-scale and involved in transporting goods over the none-too-safe waterways and highways) to provide for policing privately. 20

For the parish constable, as well as for most citizens who were not victims, the major incentive to apprehend criminals was profit. The use of informers to enforce the criminal law has a long history in England. Informing was encouraged especially for such crimes as petty theft and violation of statutes regulating trade (Beresford, 1958). Typically the lion's share of the fine levied by the convicting magistrate went to the informer. Constables were expected to make their living while in office by collecting rewards for informing, as well as assessing fees for other services. There appear to have been few standards for the day to day apprehension of criminals or for performance of policing duties. In cities such as Manchester, a steady flow of thieves and other criminals was, nevertheless, brought before the magistrates, by victims and by constables, so the system was not without some effect. Targets of policing, however, were selected according to whether the victim could safely bring the culprit before a magistrate himself, or whether potential profit was sufficiently high to interest a constable.
In the period before the establishment of full-time police by Parliamentary enactment, there was one other type of "policing" which played an important role from time to time. In the minds of advocates of a full-time police for England in the first half of the 19th century, the control of crowds and of political unrest was as great an incentive as individual crime (Hart 1951: 26). The military was used regularly for this type of policing in London until the establishment of the Metropolitan Police Force in 1829, and outside of London for most of the century. The arrival of a troop of cavalry, plus the swearing in of responsible local citizens during periods of popular disturbances, enormously increased the arresting capacity of local police, and could not have been without effect on arrest and indictment rates in key periods of social unrest.  

The full-time police of England developed in four stages.

1) In 1829, Parliament established a police force for the London metropolitan area, paid for by Parliament. By 1830, London had about 3350 full-time police to replace the hodgepodge of parish constables, private police, borough police and others which had operated independently up to that time in separate governmental units within the metropolitan area (Hart, 1951: 34). 2) In 1835, the Municipal Corporations Act restructured the 178 Parliamentary Boroughs of England, investing them with the power, among other things, to establish a full-time police to be paid and appointed by a watch committee of citizens of the borough (though constables still remained subject to most of the commands of Justices of the Peace of the county). 3) Between 1839 and 1842, two acts were passed permitting establishment of county police forces by Justices of the Peace and providing for regular pay for parish constables.
The county police forces, if established, were to be paid for by special county taxes. The resistance of the Justices of the Peace and the county gentry to a police county force is reflected in the provisions which specify that a maximum of one policeman per 1000 inhabitants could be hired under the acts (Critchley 1967: 85). 4) Not until 1856, however, were county and borough police made mandatory. The National government was to pay 25% and have authority to inspect the forces and to withhold funds from forces which did not meet its regulations. Smaller boroughs were exempted from this requirement, but over the next fifty years a series of acts gradually forced smaller and middle-sized boroughs to merge their forces with those of the county (Hart, 1951: 35-40). The power of the Home Office to regulate the police was based solely on the power to withhold funds.

It took many decades for the number and organization of these police forces to fill out. In London, the number of police, from 1830 onwards, kept approximately abreast of the population. London had one full-time policeman for every 445 inhabitants in 1830. In 1840 London had one policeman for every 443 inhabitants; in 1861, one for every 441 inhabitants. The lowest inhabitants-to-police ratio in the history of the force is 355, recorded in 1891 (Hart, 1951: 34). The rest of England acquired full-time police at a slower rate. When the County and Borough Police Act was passed in 1857, there were still fewer than 20,000 full-time police, including the London police. There was one policeman for every 1040 inhabitants in England and Wales and one policeman for every 1365 inhabitants outside of London. By 1901, with over 44,000 police in England and Wales, there was one policeman for every 738 persons. In 1921 the figure dipped to 637, but rose again reaching 727 in 1949 (Hart, 1951: 34).
Before the Municipal Corporations Act of 1835, fewer than seven boroughs had established full-time paid police. Within two years of the act, another 83 reported establishing paid police forces. After this spurt, other boroughs reported establishing forces at the rate of three or four a year. But by 1853, seventeen of the 178 boroughs had still failed to report and six were known not to have police forces. J.M. Hart estimates the total police shared by all boroughs, excluding London, in 1846 to be $3850 \pm 250$, or about one for every 1000 inhabitants. In 1853 she estimates $4375 \pm 50$ police, or one for every 940 inhabitants (Hart, 1955: 418). By 1901, the ratio for boroughs had fallen to one policeman for every 710 inhabitants (Martin and Wilson, 1969: 47).

The distribution of the police across boroughs at mid-century was far from even. The three largest (excluding London, Manchester, Birmingham and Liverpool) had the lowest inhabitants-per-policeman ratios. Together Liverpool and Manchester employed 20% of all the police in boroughs outside of London. Liverpool's force dated back to the early 19th century, necessitated in part by the need to keep order in the vicinity of the docks. Manchester and Birmingham applied for special Parliamentary acts supporting their borough police in 1839, well in advance of the act of 1856 which made a similar arrangement mandatory for all boroughs and counties. In the establishment of police, the newer boroughs led the older ones. Between 1835 and 1853, nineteen new boroughs were established under the Municipal Corporations Act of 1835. (Seven of these were in the populous county of Lancashire.) Each of the nineteen established a police force within two years of its incorporation.

The establishment of county police forces lagged still further behind. Following the permissive legislation in 1839, only thirteen
counties used the powers granted by it to establish a county police force within two years of its passing. Over the next seven years another seven counties and parts of five more took advantage of the act. The forces established under the act were usually small. In 1848, 2500 police had been employed by county forces established under the 1839 act for areas with a total of 4.5 million inhabitants, or 1 policeman for every 1800 inhabitants (Radzinowicz, 1968: 269). County taxpayers resisted the establishment of police forces. The rural areas where most of them lived did not face a chronic crime problem of the same proportions as the more densely populated parts of England. County gentry were concerned with civil disorder, and county police forces were established primarily in counties which had experienced the Swing or Chartist riots in the preceding ten years.

In 1857, England made the establishment of a police force mandatory for counties and most boroughs. Between 1860 and 1900, the most rapid increase in numbers of police occurred in the non-borough areas of England, which had lagged behind in the era of permissive legislation. While the distribution of police became more even, there were still extreme disparities. In the mid-1870's, six boroughs still had police forces consisting of a single policeman. Professionalization progressed unevenly. By 1908, 93% of all borough forces were commanded by officers who were career policemen. By contrast only 12% of the chief constables of county forces were career policemen (Critchley, 1967: 143). Counties preferred gentlemanly qualifications and family position to professional training. Local control of police remained an issue, even though boroughs and counties were required to establish a police force. The Municipal Corporations Act, which attempted to modify the means of exercising local
control and which extended the requirements of the act of 1857 to smaller boroughs, was hotly debated for several years before its passage in 1888. The tenaciousness of local interests further contributed to the unevenness of the development of the police and its very gradual professionalization, even after mid-century.

The transition from parish constables to full-time, paid police in England in the course of the nineteenth century had four important characteristics. First, the increase in full-time police occurred with varying speed for different regions of the country. In London, the increase was extremely rapid. The number of police increased much more slowly outside the metropolis, gaining momentum particularly after the passage of the County and Borough Police Act of 1856. The number of police increased most rapidly in areas of greatest population density. County gentry were concerned with the availability of police only during periods of widespread rioting, when the tranquillity of country estates was disrupted. Otherwise police were considered by the gentry to be a financial liability and an encroachment on the prerogatives of the Justices of the Peace if national government retained any control whatsoever. Boroughs and market towns, on the other hand, while equally sensitive to encroachment on local governmental prerogative, were more concerned with individual crime. Their markets and flourishing shops were the site of exposed and readily movable property and became targets for thieves. As shops multiplied and periodic markets grew, fewer, the opportunities for petty theft multiplied (Tobias 1969: 195). Crowded streets invited pickpockets, and dense housing made personal belongings more accessible to burglars. Reform was achieved first in those administrative units which could readily take charge of
reorganization and administration of police, namely the boroughs, rather than in unincorporated towns. The Reform Act of 1832 and its consequent, the Municipal Corporation Act of 1835, opened the political door to the modernization of the police in the country's largest towns.

Secondly, rapid increase in the number of police outside London was directly related to the national government's willingness to pay for them, as well as its readiness to require the establishment of forces. In 1856, the national government agreed to pay 25% of the costs of maintaining a police force as required under the County and Borough Police Act. At the same time, England never experienced a break with the political traditions of the preceding two centuries, which had resulted in entrenchment of local governmental prerogatives. While from the 1840s, England massively increased central governmental regulation of industry and welfare, absent since the Tudor era, it remained largely laissez faire as far as prescribing who should run local government and how. The management of the police is an excellent example. Until 1856, the Home Office and Parliament were able to bring no stronger pressure to establish local police forces than the withholding of troops and Metropolitan Police when they were requested by local governments to assist in the handling of local disturbances. The statutes affecting the establishment of police prior to 1856 reflect the pattern of legislation establishment for other areas of Parliamentary concern during this period: of permitting modification of local government only on certain terms, but not of prescribing reform.

The effect of local governmental resistance to the imposition of controls was to force Parliament to work through local government
to establish police forces in England, and to prevent setting up independent police authorities under national direction. While the Home Secretary was given a free hand by Parliament under the Act of 1856 to withhold funds for failure to comply with his regulations (thus giving him substantial power over local police forces), the immediate authority for directing the police remained in local hands, shared by Justices of the Peace and elected representatives of the local citizenry. By contrast with the indirect control exercised by national government over local police in England, French police were locally financed and nationally directed (Hart 1951: 37).

Thirdly, the character of the change from parish constables to what contemporaries identified as "preventive" police was as significant as the increase in numbers. While the contemporary debate surrounding the coming of the borough and county police in England need not occupy us here, it is worth noting that contemporaries were keenly aware that the professionalization of police meant primarily the increased capacity of police to observe and control behavior in public places. The rapidity of the increase in numbers actually underrepresents the capacity of the police for surveillance in comparison with subsequent periods. Not only did cities such as London and Liverpool have more police per 1000 inhabitants by the 1890s than at any time before or since, but because of long working days the number of manhours worked by police per 1000 in the population as a whole actually reached a maximum in 1891 which has not been surpassed since that time. 24

Professionalization of the police meant a profound change from the older fee-for-service system where the constable picked targets with an eye to increasing his income. 25 The parish constable was not uniformed
and had no particular wish to be visible to the public at large. The persons who supervised the parish constable's conduct, the county magistrates, did not pay his salary, nor did they very often live in the towns which he policed. The immediate effect of the 1835, 1839, and 1856 acts was the introduction of uniformed patrolmen into the street life of cities. At the same time the acts encouraged a new chain of command, completed by statute in 1882, which displaced Justices of the Peace and placed immediate control of police in the hands of a chief constable (often a professional of the Metropolitan Police Force) in the counties, and a committee of borough residents in the towns (Hart, 1951: 104). The casual administration of the Justices of the Police was replaced by more active and interested control. A suggestive benchmark for the difficulty of the transition from a non-policed to a policed society is the average number of assaults on policemen annually in each decade since 1856. In the 1870s, each year about 13,000 assaults on police were recorded. In the 1890s, about 11,000 were recorded annually. Since 1920 the number has remained at about 6000 per year (Martin and Wilson, 1969: 23).

Fourthly, while shifts in England's political structure following the Reform Act of 1832, the Chartist movement, and the trend toward centralization of government after 1850 all stimulated development of the police, none seems to have substantially affected the functions performed by the police. The extent to which older, private and non-professional means of policing were retained and blended with the new full-time police is characteristic of England. Some characteristics of older private and parish police forces were retained outright: citizens were still sworn as special constables when the need arose, citizens still
bore the legal responsibility for assisting in the apprehension of felons, and the determination of policing priorities and policies remained firmly in the hands of local government. The latter feature surely contributed, for example, to the surge of arrests for drunkenness in the latter part of the 19th century (Hoyle 1874). A further characteristic of private policing, unlike the military, is that the British police do not share in the state's monopoly on the use of force to the extent of carrying arms. British police, like the ordinary citizen, remain unarmed and carefully distinguished from military forces in style of dress and required demeanor. And in court the police have retained the legal status of the common informer.

The trend in changes in judicial administration in the nineteenth century contributed to the blending of public and private responsibility for solutions to the problem of policing. Since citizens prosecute criminal cases themselves at petty sessions, the extension of summary jurisdiction made prosecution of criminals easier for the ordinary citizen to conduct without public intervention. The extension of petty sessions must have encouraged additional prosecution by persons for whom Quarter Sessions or Assize prosecutions would have been too expensive or too much trouble. In any event, the data show a continuous rise in the number of cases brought at petty sessions.

The Impact of Full-Time Policing

All four of the major changes in policing in the 19th century tended to increase the probability of detection of crime or the probability of sanctions for crime. Our hypothesis is that these changes produced two trends in property crime rates: a short term increase in the amount of recorded crime by increasing reports of crimes and arrests,
and a long term trend toward lower property crime rates. The data for England suggest some modification of these hypotheses, but in the main the picture is much as predicted. First, the period of most rapid increase in the crime rate does not correspond to the period of most rapid addition of full-time police for England as a whole. The sharp rise in committals for indictable offenses between 1815 and 1820 can only be explained by changes in the operation of existing policing, by changes in the methods of reporting crimes or changes in the actual rate of behavior which was detected as crime. It is unlikely, however, that there was a major increase in the number of police during this period (or at least evidence of such an increase has not appeared). Secondly, when the number of police began to rise rapidly, after 1830, and in particular after 1856, crime rates for England display either erratic increases and decreases or a decisively downward trend.

The rates which we are observing are actually complex and composite. Complex, first of all because other factors than policing undoubtedly had their effect on crime rates. But the rates are also composite because the crime rates represent the total of crime rates in 226 separate police jurisdictions (in 1857) and an unknown number of non-policed areas. We can expect crime rates to follow the pattern predicted by our arguments for reasonably well-defined police jurisdictions. The composite of rising and declining trends in property crime reported to the Home Office for separate police jurisdictions (the result of the erratic introduction of police in England), could produce the fluctuations in national trend between 1834 and 1856. Only at rare intervals would particular regional or borough rates dominate the aggregate national rates. There is some evidence of this during the
Chartist disturbances and subsequent repression of 1842 and 1848. Massive numbers of arrests made possible by the concentration of troops in disturbed areas in the North boosted the arrest totals by some thousands, thereby contributing to the spikes observable for those years.

The most convincing evidence of the reduction of crime is the pattern set borough by borough, county by county. We will be content to present the evidence available for London, Leeds and the County of Lancashire. London, the first city to acquire a full-time, paid police force, experienced a dramatic increase in the number of persons charged per 100,000 in the population in the decade following the introduction of police in the metropolitan area. The rise was greater than in the rest of the country, and was followed by a decade in which the crime rate declined to below the rate in the two decades preceding the introduction of police. During this later period, the number of persons charged per 100,000 in the rest of England and Wales continued to rise.

The county of Lancashire, for which we have a relatively complete set of data, illustrates what we take to be the impact of a slower buildup of police. Borough forces were established at intervals between 1835 and 1857 (Liverpool's borough police force antedates by many decades the general buildup of police in England as a whole in the nineteenth century.) The Lancashire county police force was one of the earliest (1840) and one of the largest, consisting of 657 men by 1857 (Critchley 1967: 141). While the county had a property crime rate consistently higher than England and Wales as a whole, the rate converged rapidly with the property crime rate for the rest of the county after 1850. In other words, after mid-century Lancashire was better policed than the rest of
non-metropolitan England and also experienced a more rapidly declining rate of property crime.

Where figures are available for other counties, they are suggestive of a similar pattern—an initial, rapid rise in the crime rate, followed by a decline. We know, for example, that of the counties which established county police in 1840, by the following year eight were among the twelve counties with the highest indictable committal rates (Gatrell and Hadden, 1972: 430). And these eight were by no means all urbanized or highly populous counties with traditionally high rates of crime. Under extreme conditions of repression in Lancashire and other counties, the crime rate was wholly determined by the numbers of repressive forces amassed. Thus in 1812 and 1819 large numbers of arrests followed from the presence of large numbers of troops during "disturbances." But in 1839 when Lancashire again experienced disturbances, in the absence of large numbers of the military, the disturbances did not become recorded in the crime rate.

We have good evidence that short term fluctuations in crime rates, as well as long term trends, were the product of changes in the local police establishment in Leeds. J.J. Tobias provides crime statistics for the borough of Leeds between 1858 and 1876 (Tobias 1969: 256-267). Tobias points to the changes in overall indictable committal rate, particularly in years in which new police chiefs were appointed. Even more striking is the regular rise and fall in indictable committal rates lagged about two years after each increase or decrease in the ratio of inhabitants to full-time police in the borough. The inhabitants/police ratio fell (more police) between 1863 and 1869 and between 1872 and 1876. Between 1865 and 1869 the crime rate rose,
followed by a decline beginning in 1870. In 1874 and 1875 crime again rose followed by a decline. The decline in crime in Leeds between 1870 and 1873 no doubt was due in part to a decline in the size of the police force as well as to the earlier increase in policing.

While the trends in the available data on property crimes support the hypothesis that policing produced first a rise and then a decline in the crime rate, policing clearly does not explain all of the short term trends. In particular, in the 1880s, long after the general downward trend in the property crime rate had been established, there is a slight resurgence of the property crime rate. The nearly simultaneous fluctuations in the economy are suggestive, but as we argued above, not an explanation in themselves. While the police were rapidly increasing in number and efficiency, clearly other factors were at work, factors which in the twentieth century produce very different trends from those at the end of the 19th, despite the continual improvement (we assume) in policing. In the 20th century, the rate of property crimes has steadily increased. Further, the trends which we predicted, and found, in property crimes, do not hold for other types of crime. Crimes involving assaults do not begin to decline for England as a whole until well after 1870. Lancashire also follows this pattern.

Yet another contrast with property crime is provided by arrests for public drunkenness. We would expect arrest rates to be particularly sensitive to public concern with drunkenness, and we would not expect the behavior of those arrested to be modified by the probability of detection and arrest to the same extent as persons contemplating theft. Arrests for drunkenness rose until 1875, declined briefly, and rose again in the early 1880s, declining and rising again toward 1900 but
at no time dipping below the level reached in the early 1870s. No doubt the consistently high level of arrests during the latter part of the 19th century reflects in part the extent to which drunkenness had become an obsession of those deprecating and trying to reform working class life in the 1870s. It is apparent that each particular form of criminal behavior, and its corresponding "visible" rate responded to a different set of conditions motivating the behavior, conditions creating opportunities for the behavior and conditions governing the rate at which authorities reported and sanctioned the behavior.

France

The fundamental features of professional policing in France crystallized during the seventeenth century's great expansion of state power. The volume and intensity of policing, however, did not expand rapidly until the Revolution of 1789 and thereafter. The seventeenth-century system corresponded to the political needs of that turbulent period: it left the national army in charge of policing the provinces (especially their rural areas), and confined the policing of the major cities—at first Paris alone, then other cities—to special forces responsible to a minister in charge of internal security. In 1720 the war ministry created a distinct military force—the Maréchaussée—to handle its routine domestic policing. The Maréchaussée was the ancestor of the Gendarmerie, which still has primary responsibility for the policing of rural areas and highways, and still reports to the Ministry of War. The Parisian police force, commanded by the Lieutenant Général from 1674 on, evolved into the Sûreté Nationale; the Sûreté eventually covered all urban France with its net.
Each of these forces has several subdivisions. They overlap a bit more than our description implies; for example, the Gendarmerie now has forces in Paris for ceremonies and for crowd control. A few local forces, notably the gardes champêtres of small towns, have always existed. Finally, the regular army has always been on hand as a reserve force for crowd control.

To some extent, the growing national forces supplanted or nationalized local professional forces which were already active. The extent is probably large. For example, the state extended its control of municipal police to Lyon in 1851, to Marseille in 1908, to Toulon in 1918, to Nice in 1920; in each case it absorbed existing forces into the national structure. As with measuring "political participation" exclusively through voting in national elections or measuring "production of goods and services" exclusively through their sale on the national market, the changes in policing we register by looking at the state's professionals have more than one component. They compound: 1) professionalization of existing police activity, 2) nationalization of existing professional police activity, 3) increase in the total volume of professional police activity.

With all these qualifications, we can still say that France has done the bulk of its professional policing for more than two centuries by means of two national forces, one concentrating in the cities, the other dealing with the rest of the country. At the present stage of research, the only information more or less continuously available over large blocks of time and space is information concerning the national forces. For that simple but compelling reason, we shall confine our attention to the Sureté Nationale and the Gendarmerie Nationale.
The Expansion of Professional Policing in France

More or less continuous data concerning the volume and structure of professional policing become available in the 1820s. We have summed up the chief nineteenth-century series which are now available in Figure 8. They include the annual budget figures for gendarmerie (within the Ministry of War) and for police (within the Ministry of the Interior). They also include the authorized numbers of gendarmes, on the one hand, and of commissaires and agents, on the other. Although they are based on authorizations rather than actual performance during the year, the figures ought to represent changes in the overall bulk of the police forces fairly well.

From 1825 through 1900, the figures reveal a moderate expansion of the Gendarmerie, and a very large expansion of the police controlled by the Minister of the Interior. The Gendarmerie might have doubled in size; for the period in which we can directly observe troop strengths, however, the increase is only from about 16,000 to 21,000. The published budget for police rose irregularly from 2 million in 1825 to 13 million in 1880, while police manpower rose more regularly from just under 5,000 in 1848 to over 16,000 in 1900. At the end of the century, the Gendarmerie was still the larger force, but the police were gaining fast. Since the Gendarmerie had primary responsibility for the countryside and the Interior Ministry's police generally took over the policing of the largest cities first, this probably means small cities and towns remained the least touched by the national police forces—and probably the least thoroughly policed in any regard.
The curves of expansion have some interesting irregularities. The trend of expenditure for the Gendarmerie was already upward in the 1840s. Louis Napoleon accelerated the expansion of the Gendarmerie during the first few years after his seizure of power, then let the force level off. After a declining investment in Gendarmerie during the last years of the Second Empire, the regime which came to power in the 1870 revolution again pumped strength into the force. The fluctuations in the Sureté Nationale police were much greater. After each nineteenth-century revolution--1830, 1848, 1870--the regime which emerged consolidated its control over the country by vigorously expanding the police force. The partial exception to that rule is the Second Republic, from 1848 to 1851, which had cut expenditures in half before Louis Napoleon (who was President of the Republic before his 1851 coup set up the establishment of his Empire) tightened his grip on the state machinery. Shorter-run fluctuations in police strength depended to an important degree on the current political climate.

Politics and Policing

In France, the judicial system nationalized earlier than policing did. Before the Revolution, the power to try and to punish lawbreakers was a kind of property; it resided in a great variety of organizations: royal courts, ecclesiastical courts, Parlements and others. With all kinds of property, the general work of the Revolution was to eliminate multiple claims on the same source of revenue, ideally to reduce the claimants to two: an individual and the national state. In the case of justice, the state took the lion's share. The reforms of the early Revolution consolidated most of the courts into a single hierarchy directly responsible--and responsive--to the state. Napoleon later
reorganized the judicial system several times. He also greatly extended the apparatus of political surveillance.

After the Revolution and the Empire, the French sometimes reorganized a given level of the judicial system, added or subtracted special jurisdictions, employed military or mixed military-civilian courts to deal with people accused of participating in major insurrections, manipulated the political responsiveness and effectiveness of the judicial system. Yet on the whole a single hierarchy stayed in place: cour de cassation, cour d'assaises, cour d'appel, tribunal de première instance, justice de paix, with minor changes of name and jurisdiction along the way.

An effective, politically responsive judicial system combined with a widespread network of domestic espionage and a growing police establishment to provide the rulers of nineteenth-century France with extraordinary instruments of central control. The system had muscle. As Howard Payne puts it:

If a 'police state' be defined as a national polity in which the executive possesses both the formal right to decree and the institutionalized means of enforcing arbitrary coercive measures without the approval of review of a legislature or judiciary, then France before the Second Empire displayed the elements of a 'police state.' The upheaval of 1848 brought only partial and momentary interruption of this 'normality.' Indeed, the apparent inability of the new republican order to conduct national affairs peacefully without centralized administrative and police action led almost
immediately to the re-establishment and intensification of the traditional system (Payne 1966: 32).

Louis Napoleon knowingly extended his control over the traditional system in the preparation of his 1851 coup, then reinforced it in succeeding years.

That reinforcement of the police apparatus in the face of a political threat was the general rule. From 1825 to 1900, the five years which brought the largest increases in the national expenditure for policing were 1831, 1852, 1860, 1868 and 1872. Three of them immediately followed a revolution or a coup. The other two came in the aftermath of major threats to Louis Napoleon's regime.

Accelerating and changing under the pressure of political events, the policing of France nevertheless helped make nonpolitical crime visible. In terms of sheer numbers of cases, the bulk of the nineteenth-century police effort went into the clearing of unwanted people from public places. That included intervention in some very political assemblies and demonstrations, but consisted mostly of apprehending vagabonds and beggars. In an intensive study of the police blotter and daily prefectoral reports for Paris in 1845, Catherine Paradeise arrived at the following estimates of the mean daily number of arrests in the city:

- Vagrancy, begging: 18.7
- Property crimes: 8.0
- Crimes against persons and public order: 4.2
- Sex crimes: 0.9
- Mentally disturbed: 2.3
In addition, there was a daily roundup of prostitutes (described, but not enumerated, by Paradeise).

The arrests by warrant dealt with offenses the police had not observed directly, at least not on the day of the arrest; they were therefore, on the average, fairly serious offenses. The "property crimes," on the other hand, were mainly petty thefts and the "crimes against persons," mainly assaults. On the whole, then, routine policing of disorderly or undesirable people in public places produced most of the arrests that year.

In 1845, at least, variations in the arrests for vagrancy and begging account for most of the fluctuation from month to month. And arrests for vagrancy and begging rose and fell with the level of unemployment in the city. A plausible interpretation is that unemployment put more beggars and idlers on the street; an equally plausible interpretation is that the police, encouraged by their superiors to watch for trouble in times of unemployment, used their discretion to get potential troublemakers off the street.

The local spies of the Paris prefect of police sent in daily reports both on the state of the labor market and on the topics of conversation in the downtown squares where workers appeared daily for the shapeup. They were much attuned to the possibility that the workers would act on their grievances. The prefect's report for 22 October 1831 contains this passage:

Rain made the gatherings of workers at the Place de Grève and the Châtelet, as well as on the adjoining
quays, smaller than on the preceding days. The workers who came to those gathering places were not saying anything against the government. However, a few of them complained about how long it was taking the government to fulfill its promises to them, and were surprised that the nature the work to be offered had not yet been announced, while others spoke with satisfaction about the work on the fortifications which they hoped would open up next week around Vincennes (Archives Nationales Flc I 33).

In fact, most of the daily reports in the rich series available from the 1830s to the 1850s include remarks on the current temper of the city's workers. The implicit political analysis in these remarks was somewhat miscast: although the "vagabonds" picked up came disproportionately from the unskilled and unemployed, the men who acted collectively against the government in the many Parisian insurrections of the period came disproportionately from the skilled trades (C. Tilly 1970, Lees and Tilly 1970). The police found themselves dealing with very poor people most of the time. When the political heat rose, however, their attention turned to a relatively integrated, organized, even comfortable segment of the working class.

Trends in Recorded Crime in France

In an unsurprising coincidence, detailed information on criminal activity for France as a whole became available about the same time as the proliferation of data on policing occurred. The launching of the annual Comptes généraux de l'administration de la justice in the 1820s brought visible crime into the statistical age.
The volumes bulge with cross-tabulations: types of offenders by types of offense, penalties by jurisdiction, and so on. Although a few historians and a great many reformers and polemicists have dipped into the Compte général, no one has so far used the source to reconstruct the overall transformation of recorded crime from the nineteenth to the twentieth century. Nor have we. We have only looked at the gross geographic pattern for selected years during the nineteenth century.

The French distinguish three main levels of law violations: contraventions, délits and crimes. They correspond grossly to "infractions," "misdemeanors" and "felonies," and fall roughly under the jurisdiction of justice de paix, tribunaux correctionnels and cours d'assises. Let us disregard infractions: traffic offenses, breaking of regulations for hunting, fishing and customs, and so on. In the 1840s, French courts were charging about 115,000 persons per year with délits or crimes. In that number were about 28,000 petty thefts, 17,000 petty assaults, 10,000 cases of vagrancy and beggary, as compared with about 5,000 major property crimes and 2,000 major crimes against persons. By the 1890s, they were charging about 250,000 persons each year; that included some 50,000 petty thefts, 35,000 petty assaults, 30,000 cases of vagrancy and beggary, 2,000 major property crimes and 1,500 major crimes against persons (Annuaire statistique 1966: 161-164).

Figure 9 About Here

Figure 5 gives the details. It traces the nineteenth-century course of charges for four major categories: 1) major crimes against persons (chiefly homicide, aggravated assault and rape); 2) major crimes
against property (mainly burglary and robbery); 3) petty theft; 4) petty assault. It represents the figures as rates per 100,000 population. Several things about the trends are clear at once. First, major and minor crimes followed distinctly different paths. Despite a revival in the 1870s, the trends of recorded major property crimes ran decisively downward from the 1820s to the end of the century. The rate dropped from about 16 per 100,000 population to about 5. Recorded major personal crimes subsided gently from about 4.2 to 3.5, but via a roughly curvilinear path which reached its high points near 1850 and 1875.

The rates of both classes of petty crime rose significantly during the century. Recorded petty thefts ran around 40 per 100,000 in the 1820s, zoomed to over 100 by the early 1850s, and swung around that level for the rest of the century. Recorded petty assaults rose rather consistently throughout the period for which we have information: also around 40 per 100,000 in the 1820s, they reached 90 in the 1890s. The dip in all offenses in 1870 might be thought a result of national solidarity during the Franco-Prussian War; the expert authors of the Compte général, however, attributed it to the diversion of police to the front (Davidovitch 1970: 69). The two strong, continuous changes in the graph are the decline of major property crimes and the rise of petty assaults. The rise of petty thefts is large but not continuous, and the decline of major crimes against persons not terribly decisive.

To leave the trends there is a bit misleading. Recorded major crimes continued to decline after 1900, only to settle into trendless fluctuation in the 1920s. Minor crimes, on the other hand, reached a peak in the 1890s. It would not be equalled until the 1920s.
the 1920s, minor crimes followed an irregular downward trend. The trajectories of individual offenses differed quite a bit from one another. For example, charges of vagrancy and beggary reached their all-time high (around 35,000) in the early 1890s. They remained important for the first few decades of the twentieth century, then faded fast around the end of the Depression. Charges for petty theft, in contrast, rose insistently into the 1920s, held steady up to World War II, and reached up beyond 160,000 during the Nazi occupation. Even after the Nazis withdrew, charges for petty theft were more frequent than they had ever been before the war. The life histories of different offenses, that is, varied enough to make us think that we are dealing with more than the effects of long-run changes in reporting procedures.

The number of people charged with serious crimes declined precipitously from the 1840s to the 1890s. This does not mean the case load of the cours d'assises also declined. In the years of the 1840s, the cours d'assises were typically dealing with about 100,000 cases. Of these, they brought no charges in close to 75,000 cases, dropped the charges in another 20,000 to 25,000, actually tried just over 7,000 persons, and convicted between 4,500 and 5,000. In the 1890s, the score ran: total cases 290,000 or so, no charges 275,000, dropped charges 11,000, tried 3 to 4 thousand, convicted 2,500. The number of cases almost tripled while the number of trials dropped by half.

The gross statistics lend themselves to radically different interpretations. The number of cases brought to the attention of these superior courts suggests a great rise in the prevalence of serious crime. The number of persons charged suggests a dramatic decline in serious crime. If we read the number of cases as an
indicator of recorded crime, we can easily draw the conclusion that the police and the courts were becoming less effective at apprehending criminals. Yet their capacity for recording complaints apparently rose enormously, and their rate of conviction for persons brought to trial did not alter very much. This interesting state of affairs has inspired Boudon and Davidovitch to argue that the flood of complaints led the courts to behave as any reasonable organization would: by altering the pattern of disposition of complaints. They shifted toward the easier method: registering the complaint, but bringing no charges.

Quite likely, important changes in the way the courts disposed of complaints occurred during the nineteenth century. We are inclined, however, to two interpretations which do not agree perfectly with those of Boudon and Davidovitch: a) We suggest that the tripling of cases before the assizes was due largely to the increased availability of police; the number of police with whom complaints could be lodged also tripled. b) We suggest that the declining recording of major crimes—especially property crimes—reflects a decline in their "true" prevalence as a consequence of intensified policing.

To make all the trends consistent with our general argument, we would have to show that policing was already depressing the "true" prevalence of major property crimes by the 1820s, and had a much stronger effect on the visibility than on the "true" prevalence of petty thefts up to the 1850s. By our argument, the considerable rise in petty assaults is due to their exceptionally increasing visibility as policing expands. The mild rise and gentle decline of major personal crimes neither challenges nor corroborates our argument. We don't have definitive evidence on any of these points. Yet several features of the trends support the general argument.
First, the findings of an intensive analysis of regional patterns from 1831 to 1861 are consistent with our strong emphasis on policing (see Lodhi and Tilly 1973). Our census-by-census study revealed a strong statistical relationship between the urbanity of the department and its visible level of major property crime; the association with industrial activity was mildly negative, the associations with the current rates of urban growth and of in-migration weak and inconsistent. Major crimes against persons showed no consistent relationships with any of these variables. That much of the analysis indicates that something about the structure of urban areas as such (rather than, say, the current pace of change) promotes visible property crime. We think it is the set of factors in our earlier checklist: the extent to which urban property is controlled by individuals and small groups, the high necessity of property for valued activities in urban areas, the fact that the urban propertyless do not tend to live under the immediate surveillance of the propertied, and the relatively high accessibility and mobility of valued urban property.

Our last factor—the prevailing estimates of the cost of apprehension—varies more rapidly than the others. We think the intensity of policing significantly affects those estimates. In rough corroboration, we find that in the period from 1831 to 1861 charges for major property crimes declined most rapidly in departments with more than 15 percent of their population in cities of 10,000 or more (where the police forces of the Interior Ministry were expanding rapidly), more slowly in the most rural departments (where the Gendarmerie was growing at a more leisurely pace), most slowly of all in the departments in between (which were the last to acquire extensive professional policing). We don't have the
necessary detailed information on the emplacement and patrolling practices of departmental police forces; the information is there, embedded in the police archives, but will take a great deal of labor to dig out. At least the limited amount we do know is consistent with our general argument.

Second, the year-by-year fluctuation of visible crime in the nineteenth century indicates a significant relationship between policing and property crime. Table 4 presents zero-order correlation coefficients for all pairs of the variables we have discussed so far. (Each correlation covers all years for which we have observations on both variables in Figures 4 and 5.) We include time as a variable to catch the linear component of trend.

Table 4 About Here

Clearly, all the variables have definite trends. Most of them are very strong; all but major personal crimes have correlations with time of .85 or more. All the policing variables plus the two forms of petty crime display strong tendencies to rise continuously over time, while major property crimes display an equally strong tendency to fall continuously over time. Major personal crimes, as we have already seen, describe a gentle arc; its downward tendency is still marked enough to produce a correlation with time of -.44.

The strong common trends inflate the correlations in the remainder of the table. Nevertheless, interesting relationships stand out: the reassuringly high correlations among the policing variables, the powerful -.89 and -.95 correlations between major property crimes and the numbers of gendarmes and police, the generally stronger association
Table 4
Zero-Order Correlations of Annual Measures of Policing and Visible Crime,
Various Years 1828-1900

<table>
<thead>
<tr>
<th>Variable</th>
<th>Time</th>
<th>Major Pers</th>
<th>Major Prop</th>
<th>Petty Assault</th>
<th>Petty Theft</th>
<th>N Gend</th>
<th>N Police</th>
<th>Gend Budget</th>
<th>Police Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>1.0</td>
<td>-.44</td>
<td>-.86</td>
<td>.91</td>
<td>.85</td>
<td>.91</td>
<td>.97</td>
<td>.85</td>
<td>.91</td>
</tr>
<tr>
<td>Major Crimes vs. Persons</td>
<td>1.0</td>
<td>.30</td>
<td>-.49</td>
<td>-.05</td>
<td>-.61</td>
<td>-.73</td>
<td>-.04</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>Major Crimes vs. Property</td>
<td>1.0</td>
<td>-.73</td>
<td>-.68</td>
<td>-.89</td>
<td>-.95</td>
<td>-.68</td>
<td>-.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petty Assaults</td>
<td>1.0</td>
<td>.71</td>
<td>.73</td>
<td>.85</td>
<td>.51</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petty Thefts</td>
<td>1.0</td>
<td>.65</td>
<td>.67</td>
<td>.76</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Gendarmes</td>
<td>1.0</td>
<td>.93</td>
<td>.92</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Police</td>
<td>1.0</td>
<td>.84</td>
<td>.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure for Gendarmes</td>
<td>1.0</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure for Police</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
of crime frequencies with numbers of professional police than with the overall budget for policing. Although the table leaves moot the mechanisms involved, it provides consistent evidence of strong relationships between fluctuations in policing and fluctuations in visible crime. It indicates that major property crimes are most strongly affected of all.

Some simple multiple regressions will help separate the effects of common trend from the effects of policing. In order to do the statistical analysis, we have to narrow our attention to the 26 years for which we have observations on the crime frequencies plus numbers of police and of gendarmes. Expressed in standardized partial regression coefficients, the basic equations are:

1) major personal crimes = .26 (number of gendarmes) + 1.05* (number of police) - 2.07* (time)  \( R^2 = .88 \)

2) major property crimes = .30 (time) - .22  
  (gendarmes) - .61* (police)  \( R^2 = .96 \)

3) petty assaults = 1.9* (time) - .20  
  (gendarmes) - .85* (police)  \( R^2 = .96 \)

4) petty thefts = 1.15 (time) + .23 (gendarmes)  
  - .65 (police)  \( R^2 = .73 \)

(The starred coefficients are more than twice their standard errors.)

What we make of the equations depends on our interpretation of the time variable. Since we are already aware of the very strong tendency of policing to rise continuously over time, we consider "time" to represent the long-run effects of expanded policing as well as all the other continuous changes which affected the incentives to criminal behavior during the nineteenth century: urbanization, changing distributions of property and so on. In these equations, the numbers of gendarmes and of police then single out the effects of deviations from the main trend.
With that understanding, the equations are illuminating. True, the results for petty thefts are indeterminate: none of the individual coefficients is large enough to rely on, the coefficients for gendarmes and police point in different directions, and the overall $R^2$ is lower than in the other equations. The three remaining equations fit the observed distributions very well. We discover a long-run tendency for structural change and expanded policing to depress visible major personal crimes, countered by a short run tendency for increases in gendarmes and (especially) police to promote their visibility. Visible petty assaults move upward with structural change and police expansion over the long run, but respond negatively to short run increases in gendarmes and (again, especially) police. Finally, major property crimes have a weak tendency to rise over the long run of police expansion, strongly countered by the tendency for increasing numbers of gendarmes and (once more, especially) police to depress them in the short run.

Obviously, the discussion can't end there. In order to make this sort of analysis definitive, we need to deal with longer series, and to disaggregate the "time" variable into its hypothetical components: long-run changes in police practice, urbanization, changing distributions of property, and so on. It would be valuable to investigate the correspondence between the geography of visible crime and the fine geography of policing. It is essential to get a firmer grip on the whole policing process, from surveillance to the reporting of offenses to the judicial treatment of accused criminals. We need a serious effort to disentangle the effects of policing on the frequency of prohibited behavior from its effects on the visibility of the prohibited behavior which does occur. In the meantime, the results from nineteenth-century France tell us that
changing policing had significant effects on visible crime, especially major crimes against property.

Conclusions

The evidence from Canada is either moot or negative, the evidence from the United States mixed, the evidence from England and France encouraging but far from decisive. In the U.S., England and France, we find some interesting indications that intensified policing did, indeed, have the paradoxical effects about which we theorized at the outset: depressing the true prevalence of crimes against property, but also making those property crimes which occurred more visible. In all four countries, the rising incentives to property crime in the twentieth century appear to have swallowed up the effects of policing. Our conclusion is not that policing lost its effect; it is that contrary forces overwhelmed that effect.

Our approach makes the difficulties of interpreting official crime statistics all the more vivid. The analyses of England and France indicate that we can get somewhere with careful statistical analyses of substantial time series on policing and crime. However, the main agenda turns out to be the documentation and measurement of policing itself. We need reliable indications of changes in the definition, apprehension and reporting of criminal activity. We need information concerning the personnel--professional, semi-professional and amateur--involved in policing. It would be extremely useful to be able to pinpoint variations in the character and intensity of police surveillance over the general population. If we had this sort of information about policing, even in the absence of direct and independent measures of the "true"
prevalence of crime, we would have the means of distinguishing between the determinants of criminal activity as such and the determinants of its visibility.
<table>
<thead>
<tr>
<th>Offenses Against the Person</th>
<th>Property with Violence</th>
<th>Property Without Violence</th>
<th>Total of Criminal Offenses*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>r</td>
<td>N</td>
</tr>
<tr>
<td>1876</td>
<td>4959</td>
<td>125</td>
<td>201</td>
</tr>
<tr>
<td>77</td>
<td>5253</td>
<td>131</td>
<td>229</td>
</tr>
<tr>
<td>78</td>
<td>5376</td>
<td>132</td>
<td>222</td>
</tr>
<tr>
<td>79</td>
<td>4812</td>
<td>116</td>
<td>238</td>
</tr>
<tr>
<td>1880</td>
<td>5694</td>
<td>135</td>
<td>176</td>
</tr>
<tr>
<td>81</td>
<td>4353</td>
<td>100</td>
<td>144</td>
</tr>
<tr>
<td>82</td>
<td>4667</td>
<td>107</td>
<td>173</td>
</tr>
<tr>
<td>83</td>
<td>4868</td>
<td>110</td>
<td>132</td>
</tr>
<tr>
<td>84</td>
<td>4288</td>
<td>95</td>
<td>228</td>
</tr>
<tr>
<td>1885</td>
<td>5057</td>
<td>111</td>
<td>222</td>
</tr>
<tr>
<td>86</td>
<td>5202</td>
<td>111</td>
<td>255</td>
</tr>
<tr>
<td>87</td>
<td>4902</td>
<td>106</td>
<td>208</td>
</tr>
<tr>
<td>88</td>
<td>4790</td>
<td>102</td>
<td>225</td>
</tr>
<tr>
<td>89</td>
<td>5284</td>
<td>111</td>
<td>283</td>
</tr>
<tr>
<td>1890</td>
<td>5093</td>
<td>107</td>
<td>276</td>
</tr>
<tr>
<td>91</td>
<td>4788</td>
<td>99</td>
<td>283</td>
</tr>
<tr>
<td>92</td>
<td>4903</td>
<td>101</td>
<td>251</td>
</tr>
<tr>
<td>93</td>
<td>4689</td>
<td>95</td>
<td>362</td>
</tr>
<tr>
<td>94</td>
<td>4599</td>
<td>92</td>
<td>450</td>
</tr>
<tr>
<td>1895</td>
<td>4652</td>
<td>92</td>
<td>462</td>
</tr>
<tr>
<td>96</td>
<td>4544</td>
<td>89</td>
<td>408</td>
</tr>
<tr>
<td>97</td>
<td>4418</td>
<td>86</td>
<td>475</td>
</tr>
<tr>
<td>98</td>
<td>4594</td>
<td>88</td>
<td>540</td>
</tr>
<tr>
<td>1899</td>
<td>4227</td>
<td>80</td>
<td>444</td>
</tr>
<tr>
<td>1900</td>
<td>4598</td>
<td>86</td>
<td>413</td>
</tr>
<tr>
<td>01</td>
<td>4698</td>
<td>87</td>
<td>451</td>
</tr>
<tr>
<td>02</td>
<td>4773</td>
<td>86</td>
<td>413</td>
</tr>
<tr>
<td>03</td>
<td>5480</td>
<td>97</td>
<td>543</td>
</tr>
<tr>
<td>04</td>
<td>5919</td>
<td>102</td>
<td>552</td>
</tr>
<tr>
<td>05</td>
<td>5694</td>
<td>95</td>
<td>656</td>
</tr>
<tr>
<td>06</td>
<td>6215</td>
<td>101</td>
<td>645</td>
</tr>
<tr>
<td>07</td>
<td>6651</td>
<td>105</td>
<td>681</td>
</tr>
<tr>
<td>08</td>
<td>7379</td>
<td>113</td>
<td>893</td>
</tr>
<tr>
<td>09</td>
<td>6586</td>
<td>98</td>
<td>848</td>
</tr>
<tr>
<td>1910</td>
<td>7793</td>
<td>113</td>
<td>943</td>
</tr>
<tr>
<td>11</td>
<td>8352</td>
<td>117</td>
<td>977</td>
</tr>
<tr>
<td>12</td>
<td>9371</td>
<td>127</td>
<td>1195</td>
</tr>
<tr>
<td>13</td>
<td>11444</td>
<td>152</td>
<td>1472</td>
</tr>
<tr>
<td>14</td>
<td>12136</td>
<td>157</td>
<td>1810</td>
</tr>
<tr>
<td>15</td>
<td>10664</td>
<td>135</td>
<td>2234</td>
</tr>
<tr>
<td>16</td>
<td>9327</td>
<td>115</td>
<td>1478</td>
</tr>
<tr>
<td>17</td>
<td>6582</td>
<td>82</td>
<td>1321</td>
</tr>
</tbody>
</table>
Table A-1 Continued

<table>
<thead>
<tr>
<th>Offenses Against the Person</th>
<th>Property with Violence</th>
<th>Property Without Violence</th>
<th>Total of Criminal Offenses*</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>r</td>
<td>N</td>
<td>r</td>
</tr>
<tr>
<td>1818</td>
<td>7292</td>
<td>2049</td>
<td>10743</td>
</tr>
<tr>
<td>19</td>
<td>7731</td>
<td>2606</td>
<td>11508</td>
</tr>
<tr>
<td>20</td>
<td>8281</td>
<td>2310</td>
<td>11634</td>
</tr>
<tr>
<td>1921</td>
<td>8197</td>
<td>2609</td>
<td>12059</td>
</tr>
</tbody>
</table>

*includes other felonies and misdemeanors not listed above

Source: Statistics of Criminal and Other Offenses, p. 228.
Table A-2

Convictions for Indictable Offenses for
Canada 1886-1921

<table>
<thead>
<tr>
<th></th>
<th>Offenses Against the Person</th>
<th>Property with Violence</th>
<th>Property Without Violence</th>
<th>Total of Criminal Offenses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>r</td>
<td>N</td>
<td>r</td>
</tr>
<tr>
<td>1886</td>
<td>735</td>
<td>16</td>
<td>268</td>
<td>6</td>
</tr>
<tr>
<td>1887</td>
<td>737</td>
<td>16</td>
<td>227</td>
<td>5</td>
</tr>
<tr>
<td>1888</td>
<td>817</td>
<td>17</td>
<td>234</td>
<td>5</td>
</tr>
<tr>
<td>1889</td>
<td>992</td>
<td>21</td>
<td>307</td>
<td>7</td>
</tr>
<tr>
<td>1890</td>
<td>876</td>
<td>18</td>
<td>288</td>
<td>6</td>
</tr>
<tr>
<td>1891</td>
<td>905</td>
<td>19</td>
<td>292</td>
<td>6</td>
</tr>
<tr>
<td>1892</td>
<td>1026</td>
<td>21</td>
<td>262</td>
<td>6</td>
</tr>
<tr>
<td>1893</td>
<td>1124</td>
<td>23</td>
<td>366</td>
<td>7</td>
</tr>
<tr>
<td>1894</td>
<td>1163</td>
<td>24</td>
<td>467</td>
<td>9</td>
</tr>
<tr>
<td>1895</td>
<td>1108</td>
<td>22</td>
<td>483</td>
<td>10</td>
</tr>
<tr>
<td>1896</td>
<td>1040</td>
<td>22</td>
<td>419</td>
<td>8</td>
</tr>
<tr>
<td>1897</td>
<td>1204</td>
<td>24</td>
<td>480</td>
<td>10</td>
</tr>
<tr>
<td>1898</td>
<td>1154</td>
<td>22</td>
<td>555</td>
<td>11</td>
</tr>
<tr>
<td>1899</td>
<td>1168</td>
<td>22</td>
<td>456</td>
<td>9</td>
</tr>
<tr>
<td>1900</td>
<td>1235</td>
<td>23</td>
<td>431</td>
<td>8</td>
</tr>
<tr>
<td>1901</td>
<td>1189</td>
<td>22</td>
<td>493</td>
<td>9</td>
</tr>
<tr>
<td>1902</td>
<td>1329</td>
<td>24</td>
<td>419</td>
<td>8</td>
</tr>
<tr>
<td>1903</td>
<td>1602</td>
<td>28</td>
<td>562</td>
<td>10</td>
</tr>
<tr>
<td>1904</td>
<td>1603</td>
<td>28</td>
<td>565</td>
<td>10</td>
</tr>
<tr>
<td>1905</td>
<td>1609</td>
<td>27</td>
<td>670</td>
<td>11</td>
</tr>
<tr>
<td>1906</td>
<td>1618</td>
<td>27</td>
<td>649</td>
<td>11</td>
</tr>
<tr>
<td>1907</td>
<td>1840</td>
<td>29</td>
<td>684</td>
<td>11</td>
</tr>
<tr>
<td>1908</td>
<td>2413</td>
<td>36</td>
<td>914</td>
<td>14</td>
</tr>
<tr>
<td>1909</td>
<td>2441</td>
<td>36</td>
<td>852</td>
<td>12</td>
</tr>
<tr>
<td>1910</td>
<td>2632</td>
<td>38</td>
<td>945</td>
<td>13</td>
</tr>
<tr>
<td>1911</td>
<td>2442</td>
<td>34</td>
<td>978</td>
<td>14</td>
</tr>
<tr>
<td>1912</td>
<td>3486</td>
<td>47</td>
<td>1196</td>
<td>16</td>
</tr>
<tr>
<td>1913</td>
<td>4256</td>
<td>56</td>
<td>1478</td>
<td>19</td>
</tr>
<tr>
<td>1914</td>
<td>4428</td>
<td>56</td>
<td>1810</td>
<td>23</td>
</tr>
<tr>
<td>1915</td>
<td>3975</td>
<td>50</td>
<td>2242</td>
<td>28</td>
</tr>
<tr>
<td>1916</td>
<td>3443</td>
<td>43</td>
<td>1484</td>
<td>19</td>
</tr>
<tr>
<td>1917</td>
<td>2526</td>
<td>31</td>
<td>1322</td>
<td>16</td>
</tr>
<tr>
<td>1918</td>
<td>2526</td>
<td>31</td>
<td>2051</td>
<td>25</td>
</tr>
<tr>
<td>1919</td>
<td>2605</td>
<td>31</td>
<td>2608</td>
<td>32</td>
</tr>
<tr>
<td>1920</td>
<td>2901</td>
<td>34</td>
<td>2313</td>
<td>27</td>
</tr>
<tr>
<td>1921</td>
<td>3007</td>
<td>34</td>
<td>2611</td>
<td>30</td>
</tr>
</tbody>
</table>

*Total includes malicious offenses against property, forgery and offenses against currency and other indictable offenses not included in above categories.

Source:

N = absolute number r = rate/100,000 population
<table>
<thead>
<tr>
<th>Year</th>
<th>Males</th>
<th>Females</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>1805</td>
<td>70.6</td>
<td>27.4</td>
<td>44.1</td>
<td>34.5</td>
</tr>
<tr>
<td>1806</td>
<td>66.4</td>
<td>24.7</td>
<td>40.7</td>
<td>--</td>
</tr>
<tr>
<td>1807</td>
<td>66.3</td>
<td>25.6</td>
<td>40.7</td>
<td>--</td>
</tr>
<tr>
<td>1808</td>
<td>69.0</td>
<td>27.6</td>
<td>32.1</td>
<td>100.4</td>
</tr>
<tr>
<td>1809</td>
<td>77.1</td>
<td>30.1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1810</td>
<td>75.3</td>
<td>27.0</td>
<td>44.8</td>
<td>--</td>
</tr>
<tr>
<td>1811</td>
<td>76.8</td>
<td>27.9</td>
<td>46.0</td>
<td>--</td>
</tr>
<tr>
<td>1812</td>
<td>95.9</td>
<td>31.3</td>
<td>53.9</td>
<td>124.5</td>
</tr>
<tr>
<td>1813</td>
<td>104.7</td>
<td>31.7</td>
<td>58.6</td>
<td>--</td>
</tr>
<tr>
<td>1814</td>
<td>91.4</td>
<td>28.2</td>
<td>51.8</td>
<td>--</td>
</tr>
<tr>
<td>1815</td>
<td>112.3</td>
<td>31.7</td>
<td>63.0</td>
<td>--</td>
</tr>
<tr>
<td>1816</td>
<td>134.2</td>
<td>30.5</td>
<td>72.7</td>
<td>157.1</td>
</tr>
<tr>
<td>1817</td>
<td>211.2</td>
<td>37.4</td>
<td>109.4</td>
<td>244.4</td>
</tr>
<tr>
<td>1818</td>
<td>200.3</td>
<td>37.9</td>
<td>106.2</td>
<td>253.8</td>
</tr>
<tr>
<td>1819</td>
<td>210.1</td>
<td>36.5</td>
<td>--</td>
<td>235.6</td>
</tr>
<tr>
<td>1820</td>
<td>198.4</td>
<td>34.9</td>
<td>102.3</td>
<td></td>
</tr>
<tr>
<td>1821</td>
<td>187.9</td>
<td>31.5</td>
<td>96.2</td>
<td></td>
</tr>
<tr>
<td>1822</td>
<td>171.4</td>
<td>29.9</td>
<td>89.9</td>
<td></td>
</tr>
<tr>
<td>1823</td>
<td>168.1</td>
<td>30.1</td>
<td>87.7</td>
<td></td>
</tr>
<tr>
<td>1824</td>
<td>183.7</td>
<td>34.3</td>
<td>97.5</td>
<td></td>
</tr>
<tr>
<td>1825</td>
<td>187.7</td>
<td>38.8</td>
<td>101.4</td>
<td></td>
</tr>
<tr>
<td>1826</td>
<td>209.9</td>
<td>40.4</td>
<td>112.0</td>
<td></td>
</tr>
<tr>
<td>1827</td>
<td>233.1</td>
<td>41.1</td>
<td>122.0</td>
<td></td>
</tr>
<tr>
<td>1828</td>
<td>209.8</td>
<td>39.9</td>
<td>110.4</td>
<td></td>
</tr>
<tr>
<td>1829</td>
<td>232.8</td>
<td>44.9</td>
<td>124.8</td>
<td></td>
</tr>
<tr>
<td>1830</td>
<td>223.7</td>
<td>42.2</td>
<td>121.4</td>
<td></td>
</tr>
<tr>
<td>1831</td>
<td>242.0</td>
<td>42.7</td>
<td>120.4</td>
<td></td>
</tr>
<tr>
<td>1832</td>
<td>251.8</td>
<td>46.3</td>
<td>133.0</td>
<td></td>
</tr>
<tr>
<td>1833</td>
<td>239.3</td>
<td>44.7</td>
<td>126.3</td>
<td></td>
</tr>
<tr>
<td>1834</td>
<td>236.3</td>
<td>45.3</td>
<td>124.4</td>
<td></td>
</tr>
<tr>
<td>1835</td>
<td>239.5</td>
<td>48.2</td>
<td>114.3</td>
<td></td>
</tr>
<tr>
<td>1836</td>
<td>158.4</td>
<td>134.9</td>
<td>234.1</td>
<td>73.3</td>
</tr>
<tr>
<td>1837</td>
<td>171.7</td>
<td>149.7</td>
<td>291.4</td>
<td>81.7</td>
</tr>
<tr>
<td>1838</td>
<td>164.9</td>
<td>143.5</td>
<td>266.4</td>
<td>69.5</td>
</tr>
<tr>
<td>1839</td>
<td>175.5</td>
<td>151.2</td>
<td>284.9</td>
<td>83.6</td>
</tr>
<tr>
<td>1840</td>
<td>191.7</td>
<td>164.9</td>
<td>336.1</td>
<td>99.2</td>
</tr>
<tr>
<td>1841</td>
<td>190.2</td>
<td>165.9</td>
<td>375.5</td>
<td>108.8</td>
</tr>
<tr>
<td>1842</td>
<td>213.8</td>
<td>181.9</td>
<td>427.9</td>
<td>109.0</td>
</tr>
<tr>
<td>1843</td>
<td>192.3</td>
<td>163.1</td>
<td>334.1</td>
<td>95.5</td>
</tr>
<tr>
<td>1844</td>
<td>172.2</td>
<td>145.8</td>
<td>255.1</td>
<td>76.2</td>
</tr>
<tr>
<td>Year</td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>1845</td>
<td>154.4</td>
<td>134.6</td>
<td>244.5</td>
<td>75.6</td>
</tr>
<tr>
<td>1846</td>
<td>155.1</td>
<td>134.5</td>
<td>250.1</td>
<td>87.8</td>
</tr>
<tr>
<td>1847</td>
<td>182.9</td>
<td>164.7</td>
<td>307.9</td>
<td>92.2</td>
</tr>
<tr>
<td>1848</td>
<td>171.8</td>
<td>150.8</td>
<td>259.3</td>
<td>82.0</td>
</tr>
<tr>
<td>1849</td>
<td>163.1</td>
<td>141.1</td>
<td>245.9</td>
<td>93.2</td>
</tr>
<tr>
<td>1850</td>
<td>168.2</td>
<td>146.0</td>
<td>246.2</td>
<td>98.0</td>
</tr>
<tr>
<td>1851</td>
<td>159.9</td>
<td>136.7</td>
<td>244.5</td>
<td>88.1</td>
</tr>
<tr>
<td>1852</td>
<td>155.7</td>
<td>135.0</td>
<td>221.0</td>
<td>82.2</td>
</tr>
<tr>
<td>1853</td>
<td>168.2</td>
<td>148.5</td>
<td>239.3</td>
<td>80.1</td>
</tr>
<tr>
<td>1854</td>
<td>--</td>
<td>--</td>
<td>214.2</td>
<td>78.6</td>
</tr>
<tr>
<td>1855</td>
<td>--</td>
<td>--</td>
<td>202.2</td>
<td>68.1</td>
</tr>
<tr>
<td>1856</td>
<td>305.5</td>
<td>285.4</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1857</td>
<td>298.3</td>
<td>278.4</td>
<td>416.4</td>
<td>389.3</td>
</tr>
<tr>
<td>1858</td>
<td>274.4</td>
<td>255.3</td>
<td>357.5</td>
<td>334.2</td>
</tr>
<tr>
<td>1859</td>
<td>265.6</td>
<td>249.7</td>
<td>307.0</td>
<td>291.5</td>
</tr>
<tr>
<td>1860</td>
<td>308.8</td>
<td>287.6</td>
<td>332.7</td>
<td>303.4</td>
</tr>
<tr>
<td>1861</td>
<td>291.9</td>
<td>272.4</td>
<td>384.2</td>
<td>360.1</td>
</tr>
<tr>
<td>1862</td>
<td>322.9</td>
<td>300.9</td>
<td>382.2</td>
<td>353.9</td>
</tr>
<tr>
<td>1863</td>
<td>303.2</td>
<td>282.9</td>
<td>362.0</td>
<td>341.7</td>
</tr>
<tr>
<td>1864</td>
<td>305.1</td>
<td>285.4</td>
<td>370.4</td>
<td>350.0</td>
</tr>
<tr>
<td>1865</td>
<td>290.0</td>
<td>272.5</td>
<td>336.7</td>
<td>319.3</td>
</tr>
<tr>
<td>1866</td>
<td>313.2</td>
<td>294.3</td>
<td>383.7</td>
<td>363.7</td>
</tr>
<tr>
<td>1867</td>
<td>313.2</td>
<td>284.3</td>
<td>359.4</td>
<td>340.2</td>
</tr>
<tr>
<td>1868</td>
<td>313.2</td>
<td>294.3</td>
<td>383.7</td>
<td>363.7</td>
</tr>
<tr>
<td>1869</td>
<td>301.6</td>
<td>283.3</td>
<td>376.5</td>
<td>359.6</td>
</tr>
<tr>
<td>1870</td>
<td>277.0</td>
<td>260.9</td>
<td>331.8</td>
<td>313.9</td>
</tr>
<tr>
<td>1871</td>
<td>255.2</td>
<td>239.8</td>
<td>295.8</td>
<td>278.0</td>
</tr>
<tr>
<td>1872</td>
<td>243.1</td>
<td>229.0</td>
<td>283.4</td>
<td>266.0</td>
</tr>
<tr>
<td>1873</td>
<td>248.8</td>
<td>235.4</td>
<td>287.9</td>
<td>271.5</td>
</tr>
<tr>
<td>1874</td>
<td>245.5</td>
<td>229.9</td>
<td>289.4</td>
<td>265.0</td>
</tr>
<tr>
<td>1875</td>
<td>223.2</td>
<td>207.1</td>
<td>254.3</td>
<td>230.0</td>
</tr>
<tr>
<td>1876</td>
<td>228.0</td>
<td>211.7</td>
<td>270.1</td>
<td>242.5</td>
</tr>
<tr>
<td>1877</td>
<td>232.9</td>
<td>217.9</td>
<td>266.8</td>
<td>243.3</td>
</tr>
<tr>
<td>1878</td>
<td>239.8</td>
<td>223.9</td>
<td>267.3</td>
<td>246.2</td>
</tr>
<tr>
<td>1879</td>
<td>230.2</td>
<td>215.9</td>
<td>271.1</td>
<td>252.6</td>
</tr>
<tr>
<td>1880</td>
<td>255.9</td>
<td>240.9</td>
<td>282.4</td>
<td>264.4</td>
</tr>
<tr>
<td>1881</td>
<td>251.8</td>
<td>236.4</td>
<td>278.2</td>
<td>260.2</td>
</tr>
<tr>
<td>1882</td>
<td>254.5</td>
<td>238.4</td>
<td>300.9</td>
<td>280.1</td>
</tr>
<tr>
<td>1883</td>
<td>244.2</td>
<td>229.1</td>
<td>268.2</td>
<td>251.6</td>
</tr>
<tr>
<td>1884</td>
<td>235.1</td>
<td>219.1</td>
<td>256.0</td>
<td>237.7</td>
</tr>
<tr>
<td>1885</td>
<td>222.2</td>
<td>206.6</td>
<td>248.0</td>
<td>230.5</td>
</tr>
<tr>
<td>1886</td>
<td>217.0</td>
<td>199.9</td>
<td>245.7</td>
<td>228.4</td>
</tr>
</tbody>
</table>
Table A-3 Continued

<table>
<thead>
<tr>
<th>Year</th>
<th>All Serious Crimes</th>
<th>Non-Violent Property Crimes</th>
<th>All Serious Crimes</th>
<th>Non-Violent Property Crimes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>1887</td>
<td>217.5</td>
<td>202.2</td>
<td>242.6</td>
<td>225.9</td>
</tr>
<tr>
<td>1888</td>
<td>221.5</td>
<td>206.6</td>
<td>251.3</td>
<td>235.2</td>
</tr>
<tr>
<td>1889</td>
<td>216.4</td>
<td>203.4</td>
<td>249.3</td>
<td>234.4</td>
</tr>
<tr>
<td>1890</td>
<td>201.4</td>
<td>187.6</td>
<td>228.7</td>
<td>213.0</td>
</tr>
<tr>
<td>1891</td>
<td>198.4</td>
<td>185.0</td>
<td>223.8</td>
<td>211.5</td>
</tr>
<tr>
<td>1892</td>
<td>208.6</td>
<td>199.6</td>
<td>227.9</td>
<td>217.3</td>
</tr>
</tbody>
</table>

*For 1805-1834, figures represent all indictable committals. For 1835-1856, figures represent indictable committals plus summary (petty session). For 1857-1892, figures represent indictable committals plus all petty session trials.

Sources: Gatrell and Hadden, pp. 387-396. Lancashire statistics for selected years 1805-1834 were compiled from archival sources. Assize indictments were taken from clerk of the Crown Minutes in the Public Record Office (P.L.26). Quarter Sessions Indictments were examined at the Lancashire Record Office.
Table A-4

Rates of Policing and of Visible Crime in France 1828-1900

(All Are Rates Per 100,000 Population)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Police</th>
<th>Number of Gendarmes vs. Persons</th>
<th>Major Crimes vs. Persons</th>
<th>Major Crimes vs. Property</th>
<th>Petty Assaults</th>
<th>Petty Thefts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1828</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1833</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1838</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1843</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1848</td>
<td>13.6</td>
<td>43.6</td>
<td>5.5</td>
<td>14.0</td>
<td>51.6</td>
<td>89.9</td>
</tr>
<tr>
<td>1849</td>
<td>13.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1850</td>
<td></td>
<td>44.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1851</td>
<td>11.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1852</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1853</td>
<td>16.8</td>
<td>50.7</td>
<td>5.6</td>
<td>13.2</td>
<td>45.3</td>
<td>116.6</td>
</tr>
<tr>
<td>1854</td>
<td>23.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1855</td>
<td>24.8</td>
<td>50.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1856</td>
<td>24.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1857</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1858</td>
<td>118</td>
<td>1.1</td>
<td>5.2</td>
<td>9.1</td>
<td>47.9</td>
<td>111.5</td>
</tr>
<tr>
<td>1859</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1860</td>
<td>28.5</td>
<td>51.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1861</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1862</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1863</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1864</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1865</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1866</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1867</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1868</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1869</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1870</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1871</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1872</td>
<td>32.7</td>
<td>49.5</td>
<td>4.9</td>
<td>9.8</td>
<td>59.2</td>
<td>99.8</td>
</tr>
<tr>
<td>1873</td>
<td>34.8</td>
<td>52.0</td>
<td>5.1</td>
<td>9.2</td>
<td>59.0</td>
<td>124.6</td>
</tr>
<tr>
<td>1874</td>
<td>35.3</td>
<td>52.8</td>
<td>5.2</td>
<td>9.0</td>
<td>62.3</td>
<td>121.7</td>
</tr>
<tr>
<td>1875</td>
<td>35.1</td>
<td>54.4</td>
<td>5.3</td>
<td>7.6</td>
<td>67.0</td>
<td>104.3</td>
</tr>
<tr>
<td>1876</td>
<td>35.3</td>
<td>54.8</td>
<td>5.6</td>
<td>7.3</td>
<td>67.7</td>
<td>108.7</td>
</tr>
<tr>
<td>1877</td>
<td>35.7</td>
<td>55.2</td>
<td>4.8</td>
<td>7.1</td>
<td>67.2</td>
<td>113.6</td>
</tr>
<tr>
<td>1878</td>
<td>36.3</td>
<td>55.3</td>
<td>4.7</td>
<td>6.6</td>
<td>66.4</td>
<td>107.1</td>
</tr>
<tr>
<td>1879</td>
<td>38.0</td>
<td>55.0</td>
<td>4.9</td>
<td>6.7</td>
<td>66.1</td>
<td>110.4</td>
</tr>
<tr>
<td>1880</td>
<td>37.0</td>
<td>54.8</td>
<td>4.4</td>
<td>6.6</td>
<td>62.9</td>
<td>123.8</td>
</tr>
<tr>
<td>1881</td>
<td>37.1</td>
<td>54.6</td>
<td>4.8</td>
<td>6.6</td>
<td>70.8</td>
<td>117.7</td>
</tr>
<tr>
<td>1882</td>
<td>37.7</td>
<td>54.7</td>
<td>4.9</td>
<td>7.7</td>
<td>73.1</td>
<td>118.4</td>
</tr>
<tr>
<td>1883</td>
<td>38.0</td>
<td>54.1</td>
<td>4.7</td>
<td>6.6</td>
<td>70.4</td>
<td>118.1</td>
</tr>
<tr>
<td>1884</td>
<td>38.3</td>
<td>54.4</td>
<td>4.7</td>
<td>6.4</td>
<td>76.9</td>
<td>117.9</td>
</tr>
<tr>
<td>1885</td>
<td>39.1</td>
<td>54.8</td>
<td>4.4</td>
<td>6.5</td>
<td>75.5</td>
<td>116.9</td>
</tr>
</tbody>
</table>
Table A-4 Continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Police</th>
<th>Number of Gendarmes</th>
<th>Major Crimes vs. Persons</th>
<th>Major Crimes vs. Property</th>
<th>Petty Assaulats</th>
<th>Petty Thefts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1886</td>
<td>38.5</td>
<td>54.7</td>
<td>4.3</td>
<td>7.0</td>
<td>77.3</td>
<td>115.9</td>
</tr>
<tr>
<td>1887</td>
<td>38.9</td>
<td>54.6</td>
<td>4.1</td>
<td>7.0</td>
<td>74.4</td>
<td>121.0</td>
</tr>
<tr>
<td>1888</td>
<td>39.7</td>
<td>54.6</td>
<td>4.2</td>
<td>6.8</td>
<td>77.3</td>
<td>127.6</td>
</tr>
<tr>
<td>1889</td>
<td>39.3</td>
<td>54.4</td>
<td>4.0</td>
<td>6.5</td>
<td>74.2</td>
<td>131.4</td>
</tr>
<tr>
<td>1890</td>
<td>39.6</td>
<td>54.6</td>
<td>4.0</td>
<td>6.5</td>
<td>75.0</td>
<td>129.8</td>
</tr>
<tr>
<td>1891</td>
<td>40.5</td>
<td>54.8</td>
<td>4.3</td>
<td>6.5</td>
<td>76.6</td>
<td>132.7</td>
</tr>
<tr>
<td>1892</td>
<td>40.8</td>
<td>54.1</td>
<td>4.3</td>
<td>6.2</td>
<td>85.2</td>
<td>138.6</td>
</tr>
<tr>
<td>1893</td>
<td></td>
<td>4.6</td>
<td></td>
<td>6.3</td>
<td>92.8</td>
<td>128.2</td>
</tr>
<tr>
<td>1894</td>
<td>41.4</td>
<td>54.3</td>
<td>4.2</td>
<td>5.9</td>
<td>92.1</td>
<td>124.2</td>
</tr>
<tr>
<td>1895</td>
<td>42.4</td>
<td>51.8</td>
<td>3.9</td>
<td>5.2</td>
<td>88.4</td>
<td>116.4</td>
</tr>
<tr>
<td>1896</td>
<td></td>
<td>3.8</td>
<td></td>
<td>5.1</td>
<td>95.7</td>
<td>112.8</td>
</tr>
<tr>
<td>1897</td>
<td>42.6</td>
<td>54.3</td>
<td>3.4</td>
<td>5.4</td>
<td>94.2</td>
<td>112.9</td>
</tr>
<tr>
<td>1898</td>
<td></td>
<td>3.3</td>
<td></td>
<td>4.8</td>
<td>88.9</td>
<td>116.5</td>
</tr>
<tr>
<td>1899</td>
<td></td>
<td>3.3</td>
<td></td>
<td>5.6</td>
<td>93.4</td>
<td>113.8</td>
</tr>
<tr>
<td>1900</td>
<td></td>
<td>3.5</td>
<td></td>
<td>4.8</td>
<td>94.0</td>
<td>108.2</td>
</tr>
</tbody>
</table>

NOTE: Crime rates are for persons charged with the specified offense.
FIGURE I: Rates of conviction for all offenses (indictable and nonindictable) per 100,000 population for Canada 1876-1921

TOTAL OF CRIMINAL OFFENSES

AGAINST PROPERTY WITHOUT VIOLENCE

AGAINST THE PERSON

AGAINST PROPERTY WITH VIOLENCE

1876 78 80 82 84 86 88 90 92 94 96 98 1900 02 04 06 08 10 12 14 16 18 20 21
FIGURE 2

RATES OF CONVICTION FOR INDICTABLE OFFENSES
PER 100,000 POPULATION CANADA 1886-1921
(JUVENILE CONVICTIONS ADDED TO 1921)

TOTALS AT INDICTABLE OFFENSES/100,000 POP.

AGAINST PROPERTY
WITHOUT VIOLENCE

AGAINST THE PERSON

AGAINST PROPERTY
WITH VIOLENCE
FIGURE 3

PROPERTY ARRESTS AND POLICE SIZE PER
100,000 POPULATION IN BOSTON, CHICAGO, SAN FRANCISCO

[Graph showing the number of property arrests and police size per 100,000 population in Boston, Chicago, and San Francisco from 1820 to 1920.]

BOSTON
SAN FRANCISCO
CHICAGO
CHICAGO P.D.
FIGURE 4
PROPERTY ARRESTS AND POLICE DEPARTMENT SIZE PER 100,000 POPULATION IN NEW YORK, DENVER
FIGURE 5
PROPERTY ARRESTS AND
POLICE DEPARTMENT SIZE
PER 100,000 POPULATION
IN CHARLESTON, NEW ORLEANS

NEW ORLEANS

CHARLESTON: TOTAL
PROPERTY ARRESTS

CHARLESTON: BLACK
PROPERTY ARRESTS

CHARLESTON P.D.

NEW ORLEANS P.D.
FIGURE 6
PROPERTY ARRESTS AND POLICE SIZE PER 100,000 POPULATION IN PHILADELPHIA, ST. LOUIS

PHILADELPHIA

PHILADELPHIA P.D.

ST. LOUIS P.D.

ST. LOUIS

1850 1860 1870 1880 1890 1900 1910 1920
FIGURE 7

BOSTON

ARREST RATES PER 100,000 POPULATION
FOR DIFFERENT TYPES OF
OFFENSES & POLICE SIZE
FIGURE 9

MAJOR CRIMES AGAINST PROPERTY PER 100,000

PETTY THEFTS PER MILLION

PETTY ASSAULTS PER MILLION

MAJOR CRIMES AGAINST PERSONS PER 100,000

1830  1835  1840  1845  1850  1855  1860  1865  1870  1875  1880  1885  1890  1895
FOOTNOTES

1. That it shall and may be lawful for the said Corporation from time to time to establish such ordinances, by-laws and regulations, as they may think reasonable in the said Town, to regulate the License Victuallinghouses and Ordinaries, where fruit, victuals and liquours, not distilled, shall be sold, to be eaten or drunk in such houses or groceries; to regulate Wharves and Quays; to regulate the weighing of Hay, measuring of Wood; to regulate Carts and Carmen; to regulate Slaughter-houses; to prevent the firing of any Guns, Muskets, Pistols, Squibs and Fireballs, or injuring or destroying Trees planted or growing for shade or ornament in the said Town; to prevent the pulling down or defacing of Sign-boards, or inscribing or drawing any indecent words, figures or pictures on any building, wall, fence or other public place; and generally to prevent vice and preserve good order in the said Town; to enter into and examine all Dwelling-houses, Ware-houses, Shops, Yards and outhouses, to ascertain whether any such places are in a dangerous state with respect to fires, and to direct them to be put in a safe and secure condition; to appoint Fire-Wardens and Fire Engineers; to appoint and remove Fire Men; to make sure rules and by-laws as may be thought expedient for the conduct of such Fire Companies as may be raised with the sanction of the said Corporation; to compell any person to aid in the extinguishment of any Fire; to require the Inhabitants to provide and keep fire-buckets and scuttels, and ladders to their houses; to stop, or authorise any other person to stop, any one riding or driving immoderately in any Street, or riding or driving on any Side-walk, or to inflict fines for any such
offence; to regulate the Assize of Bread; to prevent and abate and remove any nuisances; to restrain and prevent any horses, cattle or swine, from running at large; to prevent and remove encroachments in any Street, and to make such rules and regulations from the improvement, good order and government of the said Town as the said Corporation may deem expedient, not repugnant to the laws of this Province, except in so far as the same may be virtually repealed by this Act; and to enforce the due observance thereof by inflicting penalties on any person for the violation of any by-law or ordinance of the said Corporation, not exceeding one pound ten shillings. (Quoted in Aitchison 1953: 568-69).

2. Nicolas Zay has written a very comprehensive account of sources of statistics on crime providing information and description of these sources. He also thoroughly discusses specific difficulties and problems associated with statistics on crime in Canada especially when we want to look at historical and comparative trends. See Nicolas Zay; Section V: Justice; in M. C. Urquhart and K. A. H. Buckley Historical Statistics of Canada, Cambridge; The University Press, 1965, pp. 634-59.

3. Offences against property with violence refer to breaking and entering, robberies and extortion. Offences against property without violence include a variety of crimes against property, fraud, embezzlement, false pretences, receiving stolen goods, and various forms of thefts. An indictable offence is considered an offence against the whole state as well as against persons and/or property. Before 1955, thefts were defined indictable or non-indictable
according to the value of the stolen goods (Urquhart 1965: 636). Juvenile and adult convictions were counted together to 1921 and since 1922 juvenile convictions were separately reported.

The data pose a difficulty in comparing the trend before and since 1922. A rate computed on the basis of total population for the entire period (1886-1946) being examined will distort the trend. For example in 1922 the rate/100,000 suddenly drops to 176 from 221 in the preceding year. (Statistics of Criminal and Other Offences 1946). This decline certainly could leave an impression on the reader of the table for above source that criminality declined, which is not correct. In our judgment one way to overcome this problem was to compute the rates of crime after 1922 using adult population, that is, 16 years and over. We have done so knowing that the rates calculated in this way would now become slightly inflated in comparison with the rates prior to 1929 because total population as denominator includes a significant size of very young population especially below 5 years of age, and 5-9 as well, which under normal circumstances would remain constant. Given this problem of slight inflation, the rate computed in this manner allow us to achieve maximum comparability. See Richard Maxwell Brown, "The American Vigilante Tradition" in Hugh Davis Graham and Ted Robert Gurr (eds.), Violence in America: Historical and Comparative Perspectives, New York: Bantam Books, 1969.

4. On police action by the U.S. military in the nineteenth century see, Marlin S. Reidiley, Federal Military Intervention in Civil Disturbances, Ph.D. Dissertation, Georgetown University, 1939. Accounts of the militia are often euphemistic about the policing role, and


9. The private police in the United States have not, to our knowledge, been given the serious scholarly attention their important role, especially in the nineteenth century, would seem to deserve. A beginning is made in J. P. Shalloo, Private Police: With Special Reference to Pennsylvania, American Academy of Political and Social Science, 1933.

11. The data for Boston, St. Louis and San Francisco are from Annual Police Reports. The Denver material derives from Denver City Directories.


13. This account of police organization in Boston derives from Lane, 1967.


15. Tobias attempts an assessment of crime trends in the nineteenth century relying entirely on anecdotal sources. He has merely elected an implicit bias over an explicit one. After all most of his anecdotal sources are persons whose contacts with the criminal world comprise a far smaller selection from the "actual" and a far less systematic one than the records kept by the Home Secretary.

16. It is reassuring at this point to note that anecdotal information accumulated by Tobias confirms the statistical profile. In spite of this, the argument that crime has risen continually since the advent of rapid urbanization and industrialization in western Europe has its proponents. A leading British criminologist, Leon Radzinowicz, maintains that the "optimistic" view of crime control, was largely destroyed by the experience of the
nineteenth century. Criminality in France nearly
trebled and the incidence of recidivism doubled.
If the upward trend in England was held back for
a time, that was only because the natural sources
of delinquency were artificially depleted by the
transportation of more than 150,000 offenders over-
seas... More than halfway through the (20th)
century we still see no signs of turning the
tide. (Radzinowicz 1966: 60-1)

Radzinowicz argues that crime rates are a simple monotonic increasing function of modernity. Even if we were not prepared to challenge his argument with data of our own there are serious problems with his version of it. The theory that crime originates in a delinquent subculture has never been advanced on so broad a basis, even by its originator, Sutherland. Moreover, the very fact that of the 150,000 or so transported, most were sent abroad several generations before the decline in crime makes his explanation of the decline reflected in crime rates implausible. We doubt that nineteenth century trends in crime are as elementary a function of the advance of society as Radzinowicz argues.

17. They employ the Gayer, Rostow, and Schwartz index of the business
cycle between 1820 and 1850 (Gayer, Rostow and Schwartz 1953: 355).
For subsequent years they rely on the cruder assessment of trends pub-
lished by Rostow in British Economy of the Nineteenth Century (Rost-
tow 1948: 33).

18. The correlation is negative showing high crime rates only slightly
correlated with low business cycle index scores (low scores mean
depression), Gatrell and Hadden are misled by their reliance on visual comparison. Movements, such as the Chartists, emerged in some depressed periods, but not in all. At such times increased repression made available increased numbers of persons who could make arrests for all types of crimes, such as special constables.

19. While Thomas did not employ the same means of correcting for the expansion of summary jurisdiction, she was aware of the problem and accordingly broke the statistics into periods between administrative changes. Her lagged correlation (two years) rose to +53.

20. The Thames River Police are an exception to the pattern. Founded in 1800 they were under the jurisdiction of The Home Office (Coitchley 1967: 42).

21. For example, in 1812, some 12,000 troops were concentrated in Yorkshire during the Liddite disturbances. In 1842 and 1848, thousands of troops assisted in the suppressing of Chartist assemblies and riots in Lancashire.

22. Altogether some 40 police acts were passed in the 90 years between 1829 and 1919.

23. The pattern of police reform in unincorporated towns before the Municipal Corporations Act had been to create statutory improvements commissions, giving them jurisdiction over the night watch, but not over the day police, which were usually under the control of an ancient local governmental institution, such as a court leet.

24. Other measures have been suggested as being more appropriate than mere numbers of police. Since foot patrols were the primary if not the sole means of policing, and public surveillance practically the sole function of the early full-time police, the area covered
by a town was more important than the number of inhabitants per policeman. Thus a town such as Oldham with more than 2,850 inhabitants per policeman in 1856 (compared with 446 in London and 610 in Manchester) actually covered a proportionately smaller area than either of the larger cities. According to this measure, Oldham had 20 policemen per acre while Manchester had only 12. (Gatrell and Hadden 1972: 359).

25. A notorious deputy constable of Manchester, Joseph Nadin, entered his profession as a propertyless wage earner, but retired a man of commerce with investments in local industry.

26. The interpretation offered here follows the data much more closely than Tobias' own. Tobias in fact offers the statistical evidence of crime in Leeds only to demonstrate that it conforms to no reasonable hypothesis predicting crime rates.

27. Sources for Figure 8: C. E. Nicolas, Les budgets de la France depuis le commencement du XIXe siècle (Paris, 1882) and Annuaire de l'Économie Politique for individual years. Data abstracted from these sources by Jerald Hage, to whom we are grateful. Figures for numbers of gendarmes in the Almanac de Gotha, single years, 1844 to 1890, run about 30 percent higher than the AEP figures. Over the 19 years in which we have both Gotha and AEP figures for gendarmes, the two series are correlated .76. Over the 24 years in which we have both national budget figures for gendarmes and the Gotha figures, those two series are correlated .40. Since the Almanac de Gotha frequently repeats the same figures from year to year (e.g., reporting precisely 27,014 gendarmes in every year from 1874 through 1880), we have rejected the Gotha figures in favor of the AEP.
28. The women in the same insurrections were too few and too poorly identified for us to draw conclusions about their social origins.
REFERENCES

The list includes all writings cited in the text, plus a few items which we have consulted but not cited.

Andre Abbiatieci et al.

J.H. Aitchison

Selden Bacon

David Bayley

M.W. Beresford

Alfred Bettman, L.C. Marshall, W.C. Jameson, and R.E. Miles
Albert J. Biderman

Henry L. Bienen

Donald J. Black
1968 Police Encounters and Social Organization: An Observation Study. Ph.D. dissertation, University of Michigan,

Sarah L. Boggs

W.A. Bonger

D. Bordua and A.J. Reiss

Lorne and Caroline Brown
1973 An Unauthorized History of the RCMP. (Toronto: James Lewis and Samuel).
Richard Maxwell Brown


Canada Bureau of Statistics

1953 Census of Canada 1851-52. (Quebec: John Lovell).

1878 Census of Canada 1608-1876. (Ottawa: Maclean, Roger and Co.).

Canada. Bureau of Statistics

Annual Reports of Statistics of Criminal and Other Offenses 1920-1949. (Title varies 1875/76 to 1917/18 Criminal Statistics).

Canada. Statistics Canada (Formerly Dominion Bureau of Statistics)

Police Administration Statistics 1962-

Canada. Royal Canadian Mounted Police

Reports 1874-

William J. Chambliss


Milton Cherno


Louis Chevalier

Roland J. Chilton


Theodore C. Chiricos and Gordon P. Waldo


K.O. Christiansen


S.D. Clark

1942 The Social Development of Canada, An Introductory Study with Selected Documents, (Toronto: University of Toronto Press).

1959 Movements of Political Protest in Canada 1640-1840. (Toronto: University of Toronto Press).

1962 The Developing Canadian Community. (Toronto: University of Toronto Press).

Marshall B. Cloward


R.C. Cobb

Patrick Colquhoun

Wayne A. Cornelius

K.G. Crawford

T.A. Critchley

André Davidovitch

André Davidovitch and Raymond Boudon

Martha Derthick
Maxime Du Camp
1869 "La préfecture de police et la sûreté publique à Paris."

E.F. DuCane

Aileen Dunham

I. Ehrlich

Werner J. Einstadter

J.H. Elliot

Theodore Ferdinand
Franco Ferracuti

P.H. Fitzgerald

V.A.C. Gatrell and T. Hadden

A.D. Gayer, W.W. Rostow, and A.J. Schwartz

Jack P. Gibbs

Erving Goffman

David M. Gordon
1971  "Class and the Economics of Crime," Review of Radical Political Economics. 3:

Leroy C. Gould
Fred P. Graham

E.C. Guillet
1933 Early Life in Upper Canada. (Toronto: University of Toronto Press).

R.A. Harrison
1867 The Municipal Manual for Upper Canada. (Toronto: W.C. Chewett and Co.).

J. M. Hart


H.V. Hind, T.C. Keefer, J.G. Hodgins, C. Robb, M.A. Perley and W.M. Murray
1864 Eight Years' Progress of British North America. (Toronto: L. Stebbins).

Joseph John Holmes

W.S. Hoyle
1874 Crime in England and Wales in the Nineteenth Century.
David Jacobs
1973  "Inequality and Economic Crime," (Unpublished paper, Department of Sociology and Anthropology, Vanderbilt University).

David R. Johnson

J.E. Jones
1924  Pioneer Crimes and Punishment in Toronto and Home District. (An account of many activities of magistrates both in criminal and civil matter, drawn largely from records hitherto for the most part unpublished.) (Toronto: G.N. Morgan).

Thomas Milton Kemnitz

George A. Ketcham

Gérard Lambotte
Robert Lane

Roger Lane

Albert Langeluttig

Marcel Le Clère

Lynn Lees and Charles Tilly

Peter P. Lejins

Allan Levett
Abdul Qaiyum Lodhi


A.Q. Lodhi and C. Tilly


John K. Maniha


J.P. Martin and G. Wilson


F.S.C. Mather

1959 Public Order in the Age of the Chartists. (Manchester: Manchester University Press).

F.H.N. McClintock, N. Howard Avison, and G.N.G. Rose


A.K. McDougall

1971a "Law and Politics: The Case of Police Independence in Ontario." Paper presented at Canadian Political Science Association's 43rd Annual Meeting at Memorial University, St. John, Newfoundland, June.

J.E. Middleton and F. Landon

A.C. Millspaugh

Raymond Moley
1929a Politics and Criminal Prosecution. (New York: Balch and Co.).

W.D. Morrison

Joan Nelson
1969b "The Urban Poor: Disruption or Political Integration in Third World Cities?" World Politics, 22 (April): 393-414.

Donald J. Newman
C.E. Nicolas
1882 Les Budgets de le France Depuis le Commencement du XIXe Siecle. (Paris:
Ontario Bureau of Statistics and Research, Department of the Provincial Treasurer.

Catherine Paradeise
1971 "La criminalité à Paris au début de XIX siècle."
Unpublished paper, Center for Research on Social Organization, University of Michigan.

Howard C. Payne

David J. Pittman and William F. Handy

L. Radzinowicz
L. Radzinowicz

Alfred Ray and Louis Feron

A. Redford

Marlin S. Reichley

Albert J. Reiss, Jr.

Charles Reith
James F. Richardson

W.R. Riddle

Eugene F. Rider

W.W. Rostow

George Rude

James Rule and Charles Tilly
1972 "1830 and the Unnatural History of Revolution."

J. Thomas Scharf
1883 History of St. Louis City and County, from the Earliest Periods to the Present Day. (2 Vols.) (St. Louis).

J.P. Shalloo
1933 Private Police: With Special Reference to Pennsylvania, American Academy of Political and Social Science.
Clifford R. Shaw and Henry D. McKay


Allan Silver


Jerome H. Skolnick


Neil J. Smelser


Bruce Smith

1925 The State Police. (New York: Macmillan).

David Snyder and Charles Tilly


J.R. Somers-Vine

1879 English Municipal Institutions: Their Growth and Development from 1835 to 1879 Statistically Illustrated. (London: Waterlow and Sons).
H.O. Sprogle

Philip John Stead

Arthur L. Stinchcombe

M.P. Straus

E.H. Sutherland and D.R. Cressey

Denis Szabo
1960 Crimes et villes. (Louvain: Université Catholique).

Dorothy S. Thomas

J.J. Tobias

Jean Tulard
1964 La Préfecture de police sous la monarchie de Juillet suivi d'un inventaire sommaire et d'extraits des rapports
United States Senate


M.C. Urquhart and K.A.H. Buckley


J.P. Turner

1950 The North-West Mounted Police 1873-1893. (Ottawa: King's Printer and Controller of Stationery).

H.J. Venter


Marvin Wolfgang

1968 "Urban Crime." In James Q. Wilson, ed., The Metropol

Marvin Wolfgang and Franco Ferracuti

E.A. Wrigley

1972 Nineteenth Century Society, Essays in the Use of
Quantitative Method for the Study of Social Data.
(Cambridge: At the University Press).