Acta Criminologica

Violence and Robbery

A case Study

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Volume 5, numéro 1, janvier 1972

URI: https://id.erudit.org/iderudit/017021ar DOI: https://doi.org/10.7202/017021ar

Aller au sommaire du numéro

Éditeur(s)

Les Presses de l'Université de Montréal

ISSN

0065-1168 (imprimé) 1718-3243 (numérique)

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Citer cet article

Normandeau, A. (1972). Violence and Robbery: A case Study. *Acta Criminologica*, 5(1), 11–106. https://doi.org/10.7202/017021ar



Résumé de l'article

VIOLENCE ET VOL QUALIFIE : ETUDE DE CAS

Cette etude est une recherche empirique de nature sociologique sur un type de criminalite : le vol qualifie ou vol avec violence. Le vol qualifie est un delit ou l'usage de la violence physique ou une intimidation a cet effet est deploye par le criminel afin de prendre illegalement l'argent ou un objet qui appartient a la victime.

Plus de 350 000 vols qualifies ont lieu chaque annee en Amerique du Nord. Toutefois, jusqu'a tout dernierement aucune recherche phenomenologique n'avait ete entreprise sur le vol qualifie. La recherche qui est presentee dans cette monographie essaie donc de decrire les elements criminologiques qui sont associes au vol qualifie. La situation du vol qualifie dans une grande ville nord-americaine, c'est-a-dire la ville de Philadelphie, U.S.A., est presentee. Il s'agit de l'analyse de 1 722 evenements de vols qualifies (un echantillon de 10 pour cent) survenus a Philadelphie de 1960 a 1966. Cette recherche a essaye de saisir les tendances et les modeles (patterns) du vol qualifie dans le temps et dans l'espace. Le modele statistique utilise etait celui de l'indice de gravite de Sellin et Wolfgang (1964). Le modele theorique utilise etait celui de Wolfgang et Ferracuti (1967).

Voici quelques conclusions pertinentes: a) L'indice de gravite de Sellin et Wolfgang donne une vision plus juste des tendances et des profils du vol qualifie par rapport aux statistiques policieres ordinaires, b) Cet indice de gravite a revele, par exemple, que les vols qualifies commis par des jeunes sont aussi graves que ceux perpetres par les adultes, c) Le vol qualifie execute au sein de bandes organisees augmente chaque annee. d) Plus de la moitie des vols qualifies ne comportent aucune violence physique effective, e) Plus de 85 pour cent des vols qualifies sont commis a l'egard de victimes completement inconnues des agresseurs, f) Les chances pour un voleur de ne pas etre pris par la police sont tres bonnes, g) Le vol qualifie est surtout commis par les jeunes qui sont issus de milieux defavorises. h) Le vol qualifie est surtout lie aux commerces et aux maisons d'affaires plutot qu'a des particuliers, i) La distance qui separe les lieux de residence

de l'agresseur, de la victime, et l'endroit ou se produit le vol est semblable aux distances constatees dans l'etude des migrations, des diffusions de messages et des choix maritaux. ;') L'alcool est rarement present autant chez l'agresseur que chez la victime, sauf pour environ 12 pour cent des cas. k) La victime contribue quelquefois a sa propre victimisation, soit environ 11 pour cent des cas. /) La theorie d'une sous-culture du vol plutot que celle d'une sous-culture de violence peut expliquer le comportement du voleur, m) II n'y a pas de discrimination raciale au niveau des sentences, n) Tout compte fait, le vol qualifie a plutot les caracteristiques des crimes contre la personne.

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VIOLENCE AND ROBBERY A CASE STUDY

André Normandeau

CONTENTS

Chapter one: The nature of this study
Chapter two: Spatial patterns and environmental opportunities
Chapter three : Ecology, mobility and distance
Chapter four: Previous record: subculture of violence or subculture of theft?
Chapter five: Adjudication and discrimination
Chapter six: Summary
Annex A
Annex B
References
Selected bibliography on robbery

THE NATURE OF THIS STUDY *

INTRODUCTION

More than 350 000 crimes of robbery take place each year across North America. During calendar year 1970, there were an estimated 325 000 robberies committed in the *United States* and 25 000 in *Canada*. However, no full-length research on this side of the continent has yet been devoted to the *phenomenological study* of a crime whose annual statistical figures indiscriminately lump together the crime of the armed robber who threatens the life of an adult citizen and that of the ten-year-old boy who threatens a younger and weaker child and thereby succeeds in relieving him of his dime. In *Europe, England* (McClintock, 1961) and *Belgium* (Bekaart, 1970) have already been under scrutiny in this perspective.

A few North American pieces of research have been done, nonetheless, in the last few years, be it in Quebec (the Prévost Commission, 1969, and the Quebec Police Commission, 1971) or in the United States (the Eisenhower Commission, 1969), but the overall results come as a confirmation of the trends and patterns we discovered in the present research which studied crimes of robbery in Philadelphia from 1960 to 1966.

This monograph will not report on some of the findings which we have already published (Normandeau, 1968b, 1968c,

^{*}I wish to thank my professional mentors at the University of Pennsylvania, Professors Marvin Wolfgang and Thorsten Sellin, who have constantly supervised my efforts and their insights have been invaluable. My debt to them transcends the present and covers the full length of my research training under their scholarly guidance. My wife Pierrette was most efficient — as usual — in transcribing criminal records and computing special rates. The Philadelphia Police Department was completely cooperative and deserves credit for its deep interest in research.

1969a, 1969b) nor on the general statistical trends in crimes of robbery in time and space across the United States (see Normandeau, 1968a, p. 33-89).

In these published papers, we showed, for example, that a new index of crime which take into account the quality as well as the quantity of criminal events such as robberies yielded more significant information about seriousness that the usual police statistical indexes. The new index, labeled the S-W index (Sellin-Wolfgang, 1964) was thus seen, empirically, to be a valid supplement to the official Uniform Crime Reports, labeled the UCR index (Normandeau, 1969a). Another article compared a robbery typology developed in London with the data in Philadelphia. The results indicated that robbery was on a more professional and organized basis in London that in Philadelphia (Normandeau, 1969b), Finally, we related some of our findings with those of other similar phenomenological researches on homicide, forcible rape and aggravated assault in several cities and found that robbery shows the characteristics of a crime against property rather than a crime against the person (Normandeau, 1968c).

Let us mention, finally, that a few additionnal parts of the original study (Normandeau, 1968a) will not appear in the present monograph. In particular, we will not discuss trends in patterns (a diachronic perspective) but only patterns in a synchronic way. Furthermore, we have decided to leave out the data on the law of robbery, on the incidence of detection, on alcohol and victim-precipitation, on means of attack and temporal patterns and on race, sex, age and social differences.

The present problem

Robbery is an offense in which force or a real threat of force is used to deprive the victim of money or property. In some instances, bodily injury is involved. Weapons may or may not be used. Robbers may be amateur or professional, solitary or organized. The behavior included in this criminal category ranges from « mugging » and « heist » in the street or home through hijacking and bank robbery. Robbery is a versatile and complex crime.

Because robbery is at once an acquisitive offense and one involving personal confrontation, both the law and criminal statistics show confusion in classifying it. Some penal classi-

fications, such as the one used in federal statutes, place robbery among property offenses; others, such as the Pennsylvania Penal Code, place it among offenses against the person. In statistics the percentage of offenses cleared by arrest and the percentage of offenders found guilty from among persons charged with robbery consistently fall midway between offenses against the person and offenses against property, thus reflecting the dual and overlapping character of robbery. In fact, the national criminal statistics for the United States, published by the Federal Bureau of Investigation, classify robbery with crimes against property in the first part of the report on crimes known to the police, but then classify it with crimes against the person in the second part of the report on arrest data.

Robbery differs from embezzlement, forgery, larceny and many other property offenses in that the perpetrator physically confronts and dominates the victim. Subterfuge is not usually a part of this «heavy» crime. However, some robbers have been romanticized as courageous, frank, direct and deliberate offenders, as opposed to the despicable petty thief. The bright side of the legend of Robin Hood or Jesse James is still with us. And people have popularly reduced the crime of robbery to the rare but sensational stagecoach, train or bank robberies of the past and present. The « great » British train robbery in 1963 only contributed to reinforce this image.

Bell (1953), in discussing crime as an American way of life, points out that the American hero has been the hunter, cowboy, frontiersman, soldier, naval hero and, in the crowded slums, the man with a gun who acquired by personal merit and courage what was denied to him by complex orderings of a stratified society. Bell, however, recognizes that the man with the gun has lost much of his glamour with the evolvement of the « industrial, non-heavy » rackets. According to Bell, as the American businessman became « civilized » and less « buccaneering », so did the man with the gun.

In any event, many robbers have verbalized a romantic stereotype of themselves and still allude to themselves as « honest thieves » who go forth and directly take what they want. The reality, however, seems much more trivial and much less glamorous as the reading of some cases in the files of the Philadelphia Police Department shows:

Case n^o 1. James B., the offender, is a Negro male, 13 years

of age. He approached the victim, Aaron S., also a Negro newsboy male of 13 years of age, and asked him for 5 cents. When Aaron told him he did not have any money, he struck him on the hand. At that time the police arrived and James ran away but was caught. James was officially arrested and charged with « attempted highway robbery » and with « assault and battery ». Cleared by arrest.

Case n° 2. Nancy T., the victim, is a Negro female, 35 years of age. She drank in a bar until midnight and on her way back home, two colored men of about 25 years of age pushed her and grabbed her bag containing \$12. No injury. « Highway robbery » (purse snatching). Case: active.

Case n° 3. Bill K. and John H., the offenders, are both Negro males. The first man is 22 years old, the other 17. They broke into the private residence of an elderly white woman, beat her and stole diamonds evaluated at \$150. They were unarmed. The old woman had to be hospitalized. She knew John because he was living in the neighborhood. With this information the police could arrest John and charged him with (residence) « robbery ». The other offender is still at large. The money was not recovered. Cleared by arrest (at least one).

Case nº 4. Three Negro youths entered a drugstore. Each had a gun. They forced two Negro clients and the white owner to lie down on the floor. They emptied the cash register and took \$86. (Drugstore) « robbery ». Case : active.

Case n° 5. A white man and a white woman in their forties were living together in common law. The man, after a quarrel, decided to leave the house. He forced his way to his wife's bedroom, notwithstanding her verbal resistance, took her pocket-book containing \$31, and left. She called the police who arrested the man the following day. He was charged with (residence) « robbery ». Cleared by arrest.

Case nº 6. Two Negro youths jack-rolled a Negro man of 45 years of age coming out of a bar at night. The man resisted. So the youths kicked him, beat him, and took \$6 from his pocket. The man was treated and discharged. « Highway robbery ». Case: active.

Case no 7. Two white men of about 30 years of age entered a Loan and Finance Company and at point of gun ordered the white manager to give them all the money he had in the office. They took \$210 and were ready to leave when one

female employee began to scream. One of the offenders became nervous and fired in her direction. She was not hurt. They escaped. (Commercial house) « robbery ». Case: active.

Case nº 8. One Negro man, about 50 years of age, put his gun in the face of a white female employee of the PTC in a subway station and asked for the money. She refused to give it to him and she screamed. The offender was frightened and left right away without the money. « Attempted robbery ». Case: active.

Case no 9. A Negro man and a Negro woman of about 20 years of age stopped a taxi cab (Negro driver). On their way to a given address, they told the driver that it was a holdup. He gave them \$11. They escaped by foot. (Taxi cab) « robbery ». Case: inactive, because the police has investigated all of its leads without success and is waiting for a further development.

Case n° 10. The wife of a Negro man, 34 years old, phoned the police to tell them that her husband had been robbed of \$25 on his way home from work. The police interviewed the man. There were so many contradictions in his story that the police concluded that the man had been trying to hid from his wife the fact that he had spent all of his money on drinking. Case: unfounded.

These cases describe very well the wide spectrum of behavior present in robbery events. Today, however, robbery offenses are accounted for in a unique general classification. Within this category there is included a wide span of actual criminal acts, from those considered most serious to those which are of minor consequence. This category is so broad with respect to the nature of the behavior covered that it does not indicate the relative seriousness of the crimes actually reported. We have here an excellent example of the need for subclassification. Robbery is a crime which has increased or decreased in total number and rates, but there is no knowledge of the variation that has occurred in different types of robbery. Such increases or decreases as have been observed may be due to variations in armed robbery or in strong-arm robbery, which in some instances amounts to no more than drunk rolls. As one publication puts it: « Reports are often received today that children have been engaged in hijacking coins from each other. These incidents have been reported as robberies... There

is no basis upon which to determine whether or not there has been a growth. There have been many cases that have received a great deal of publicity, but without careful classification, it cannot be known whether the impression of increase is backed by fact » (State of California, 1958, p. 19).

Such remarks are not isolated. Winnet (1956, p. 1) mentions a study where « hundreds of robberies were reported. An analysis showed many of them involved petty sums, one as low as ten cents, a tribute exacted by one school boy from another. » Sellin (1956, p. 8) indicates that «robbery, for instance, evokes in the mind of the man in the street the picture of an armed hold-up man. Of course, there are juveniles in the upper-age bracket who conform to this pattern but especially among the younger children robbery consists mostly of bullying still younger ones into parting with their pennies. » Teeters (1956, p. 11), in turn, asks the question: « What is highway robbery? In the thinking of the American people, this is indeed a serious offense. Yet we know of a case last year in which a 14-year-old approached another boy of a similar age and demanded 15 cents. The boy accosted stated he had only a quarter. The highway robber took the quarter, had it changed, and returned to the other boy 10 cents. This offense is listed as highway robbery. Another instance involved two boys who extorted 20 cents daily for a week from another boy as he went to and from school. This youthful hijacking was reported by the victim's parents to the police; charge against the two offenders - highway robbery. Now we must admit that such extortion and hijacking is nasty behavior but to call this highway robbery and still keep a straight face is naive. » In a similar vein, finally. Wolfgang (1967, p. 150) has written that « very often the crude legal labels attached to many acts committed by juveniles give a false impression of the seriousness of their acts. For example, a highway robbery may be a \$100-theft at the point of a gun and may result in the victim's being hospitalized from severe wounds. But commonly, juvenile acts that carry this label and are used for statistical compilation are more minor. Typical in the files of a recent study were cases involving two 9-year-old boys, one of whom twisted the arm of the other in the school yard to obtain 25 cents of the latter's lunch money. This act was recorded and counted as highway robbery. »

The underlying problem stressed by these authors is quite clear. Systematic studies which would provide rational subclassifications with relation to the level of seriousness of robbery offenses need to be developed. Otherwise, we may be merely counting numbers and lumping unlike quantities together. The central problem is to find ways for classifying robbery events which would maximize the power of the information for purposes of different specific social action.

The efforts of the present study will thus be concentrated in large part precisely upon maximizing the power of our information on robbery while investigating in depth the patterns of robbery in Philadelphia. The study is phenomenological and typological.

The student of criminology is well aware of the importance of studying the various forms of criminal behavior. Continued progress in criminology depends largely on the study of types of crime. Like all social phenomena, crime is structured, and its patterns must be unraveled if we are to label criminology a science.

The goal of a science is to accumulate and systematize knowledge of the natural or social world. Using established methods accompanied by a particular view of reality, science conceptually orders empirical phenomena. Science is a search for the recurrent and uniform. In eliminating the unique and irrelevant, science attempts to understand that which can be expressed in general terms. The scientific study of human behavior assumes that the basic behavior is studied as a process or as a sequence of events in which certain phenomena are related to other phenomena. Such generalizations, when eventually achieved, are usually stated in terms of probabilities. In the study of human behavior there is an attempt to order the diversified world of discrete phenomena. This task is often accomplished through the development of classifications. The categorizing of observations into classes or types provides a means by which concrete occurrences can be ordered and compared (McKinney, 1966).

Such an approach, when applied more specifically to the field of criminology, seals this area of study with the stamp of science. It is in this sense that Sellin (1938) talks about the « discovery of constants » in the study of crime, and Wolfgang (1963, p. 158) affirms that « so long as theory and research

of crime, criminals, and social reaction to both are based upon a normative orientation that is scientific and the goals of which constitute a description, measurement, analysis, or interpretation of patterns, uniformities, causal relationships, and probabilities, we may assert that such theory and research comprise the field and our meaning of criminology ».

But much of the work in criminology has traditionally been concerned with crime in a much too general fashion. « Perhaps it is time », Morris (1955, p. 4) suggests, « that we faced the fact that the generally used concept of crime is altogether too broad to be of much use to the serious investigator of criminal behavior... To put it in semantically unrefined and unsophisticated terms. I am suggesting that if we are to get on with the business of learning to deal more effectively with crime we had better stop talking about crime and begin to identify and study with as much care and thoroughness as is possible the nature and working of the significant factors essential to each type of criminal behavior. » And Gibbs (1960, p. 322) to add up in the same perspective: « Crime as legally defined is not a unitary concept because certain types of behavior are subsumed under it which, when reduced to rates, vary independently of each other. As such, the overall legal category is causally heterogeneous... It should be abundantly clear that theories which treat crime as though it were a unitary concept are particularly prone to failure, and that the search for something which explains crime in general is the blind spot in criminology. »

Criminologists have in recent years followed these advices and turned their attention to the study of particular types of crime.

Efforts are being made to delineate categories of crime and criminal behavior which are homogeneous with respect to a specific explanation. In criminology, considering the wide range of phenomena subsumed under the concept of crime, an adequate general theory may be formulated only after specific theories at lower levels of explanation have been formulated and verified for specific orders of crime. An adequate explanation of criminal behavior should be modified to explain certain types. Criminologists, happily, are now giving greater attention to the identification, classification, and description of types of criminal behavior, and our study falls within this movement (Gibbons, 1965; Ferdinand, 1966; Roebuck, 1967).

The Philadelphia study

It is the purpose of the present study to examine and to analyze in detail the specific offense of robbery by using Philadelphia, Pennsylvania, as a community case study. We certainly think that our results can be interpreted in a broader context. Analysis will be made of a yearly 10 per cent random sample of all crimes of robbery listed by the police in this city between January 1, 1960 and December 31, 1966. Table 1 indicates that a total of 1 722 robbery police reports have been included in our sample. Because in a few cases there was more than one victim, the total sample number of victims is a little higher, i.e., 1785. Because many robberies are committed by two or more offenders, the estimated number of offenders is 2 482. However, because only about 40 per cent of the robberies are cleared in Philadelphia, the total sample number of arrested offenders is 892. This number represents a figure a little higher than 40 per cent of the sample number of robberies because in some cases there was more than one arrest for one cleared robbery 1.

TABLE 1

Number of robberies in Philadelphia
and number in the sample of the present study: 1960 to 1966

Year	Total nº robberies	Sample no robberies	Sample no victims	Sample nº offenders		
_	robbettes	robberies	vicums	estimated	arrested	
1960	2 014	201	213	271	114	
1961	2 215	221	229	307	127	
1962	2 448	244	248	317	133	
1963	2 429	242	251	259	122	
1964	2 753	275	288	319	130	
1965	2 893	289	292	387	135	
1966	2 502	250	264	303	131	
Total	17 254	1 722	1 785	2 482	892	

These seven years were chosen because records for these years were the latest available, and also because this span of time seemed sufficient to carry a trend analysis in patterns of robbery.

^{1.} A few cases of robberies, among the most serious, are not included because of the rule followed by the police to label a report according to its highest & official > seriousness. In this perspective, robbery comes after homicide or rape. Wolfgang (1958) and Amir (1965), in studies on homicide and rape in Philadelphia, respectively, found robbery present in 6.8 per cent of the homicide cases and 4.0 per cent of the rape cases.

Throughout this study, the analysis is made mainly on the basis of police data. Previous studies which used similar data are indicated in Table 2.

TABLE 2
Prior studies of patterns in crime comparable to the present study

Crime	City	Investigator	Data years
Homicide Homicide Homicide Rape Robbery Assault Violence Violence	Philadelphia Houston Baltimore Philadelphia London Saint Louis London Montreal Washington (D.C.)	M. E. Wolfgang A. D. Pokorny Justice Commission M. Amir F. H. McClintock D. J. Pittman F. H. McClintock G. Tardif Crime Commission	1948-1952 1958-1961 1960-1964 1958: 1960 1950: 1957: 1960 1961 1950: 1957: 1960 1964 1965

This research, thus, does seek to determine whether robbery exhibits definite objective order, regularities, uniformities or patterns, and if these patterns profiles remained the same within a period of seven years in Philadelphia.

Methodologically, the present work is essentially an exercise in data reduction rather than in theory construction or testing. As a result, the conclusions are quite descriptive, and there is relatively little analysis or discussion of the forces which bring about the reported patterns. Therefore, there is essentially no way to anticipate whether or not these patterns will persist or change, or under what conditions they will do one or the other. No one scholarly activity can accomplish everything. The data are simply inadequate to permit any sensible theoretical development of this sort at this time. It may be that such theories can be developed only after many researches have been conducted along the lines of the work reported and along other lines as well.

However a process of learning such as the present one begins nevertheless with some a priori knowledge and interrogative hypotheses which lead to the accumulation of empirical data in order to answer meaningful questions. From these data new hypotheses may be formed and tested for significant associations. Finally, cautious, plausible, and suggested interpretations of the collected and analysed data may then provide clues to the ways in which general theories of behavior might be applied or tested.

A note on statistics

The objective in the statistical analysis is to determine the degree to which specific variables differ. The nature of the data imposes certain limitations upon the type of statistical test which may be suitably applied.

It was decided, therefore, to employ statistical techniques whose models entail the least stringent requirements concerning the mathematical properties of the data to be analysed. The chi-square (χ^2) test is used to test the hypothesis that two or more groups differ significantly.

The criterion of statistical significance employed is the 0.05 level of significance. In terms of our research objective, this signifies that if the differences between two or more categories of variables could have occurred by chance in no more than five times out of a hundred, we will infer that the differences are related to the antecedent variable according to which the cases are analysed. A correction for continuity was also used.

Of course, there is noting « sacred » about the 0,05 level. But for the purposes of the present study, each time we will use « significant » or « non-significant », we will refer to this level of significance (unless otherwise mentioned).

SPATIAL PATTERNS AND ENVIRONMENTAL OPPORTUNITIES

The Philadelphia Police Department in classifying crimes of robbery uses an official codification with 23 categories, from « highway » to « miscellaneous » robbery, as shown in Table 3. This classification gives us a first idea about some spatial elements present in crimes of robbery. We learn, for example, that « purse snatching » robbery, usually committed in an open space, constitutes from seven to eight per cent of all robberies each year, and that savings and loan associations are robbed about one per cent of the time when robbery takes place. « Highway » robbery, with between 45 and 50 per cent of all cases, is the most prevalent by far. The Table also tells us that «highway» robberies with weapons are significantly less numerous than «highway» robberies without weapons. But for business robberies (commercial house, drugstore, chain store, etc.), the events accompanied by a weapon are much more numerous.

The distinction between highway, business residences and miscellaneous robberies is common usage in criminology nowadays, and it may be useful to look at it from different vantage points.

First of all, let us turn our attention to a relatively new approach to the long neglected problem of constructing crime occurrence rates on the basis of environmental opportunities specific to each crime category and sub-category (see Boggs, 1965, and Reiss, 1967). Conventionally, rates are computed as the number of crimes that have occurred in an area (e. g., Philadelphia) relative to the total number of people residing in that area. A valid rate, however, should form a probability

TABLE 3

Crimes of robbery as to the Philadelphia Official Crime Code : 1960 to 1966
Philadelphia sample (in percent)

Crime Code	1960	1961	1962	1963	1964	1965	1966	Average
Highway, weapons	17,5	17,9	17,0	19,1	16,9	18,5	19,5	18,1
Highway, no weapons	30.2	28,8	29, 4	26,3	31,4	30,8	30,0	30,4
Purse snatching, \$50 and over	1.1	1,4	1,7	1,3	1,0	0,8	0,6	1,1
Purse snatching, \$5 to \$50	4,3	4,1	3,8 2,5	3, 4	4,1	5,1	4,0	4,2
Purse snatching, under \$5	2,1	2,2 7,9	2,5	2,8 7,2	2,1	1,4	1,8	2. 0
Commercial house, weapons	8.1	7,9	7.4	7,2	6,9	9,2	8,9	7,7
Commercial house, no weapons	1,3	1,1	0,9	1,1	2,3	1 , 5	1,2 0,7	1,4
Drugstore, weapons	0,8	1.0	1,3	1,6	1,1	0,3	0,7	1,0
Drugstore, no weapons	0.2	0,3	0,5	0,5	0,4	0.1	~	0,3
Gas station, weapons	1,8	1,9	1,8	1,4	1,1	2,3	2,0	1,8
Gas station, no weapons	0,3	0.2	0.4	0,3	0,4	0,5	0,4	0,4
Chain store, weapons	1.0	0,9	0,6	0,5	1,2	1, 4	1,1	1.0
Chain store, no weapons	0.2	0,1	·	0,2	~	0.4	0,2	0,2
Residence, weapons	3,8	4,0	3,8	3,9	4,2	3,3	3.5 3,0	3,9 3,1
Residence, no weapons	2,6	3.0	3,3	3,6	2,8	2,0	3,0	3,1
Bank-Loan, weapons	0.9	0.7	0.4	0,7	0,5	3.3 2.0 0,7	1,0	0,7
Bank-Loan, no weapons	0,2	_		0,1			0.2	0,1
Taxi cab or bus, weapons	3,7	3,6	3. 9	4,3	3,5	3,4	3.2	3,8
Taxi cab or bus, no weapons	0.5	0.7	0,5	0.4	0,7	0,2	0.2	0.5
Grocery store, delicatessen, weapons	2,7	2.4	2.8	2,3	2,5	2,8	3,2	2,7
Grocery store, delicatessen, no weapons	0,4	0.5	0,6	0.7	1,0	0.1	0,4	0.5
Miscellaneous, weapons	10.6	10.9	10.4	10.0	9.4	11.2	8.6	10,4
Miscellaneous, no weapons	5.9	5,6	5.8	5,5	6,3	4,8	5,2	5,7
Total	100,0 (201)	100,0	100.0	100,0 (242)	100,0 (275)	100,0 (289)	100,0 (250)	100.0 (1 722)

statement, and therefore should be based on the risk or target group appropriate for each specific crime category. The need, in fact, is for the development of so-called « consumer-oriented crime statistics ».

It is evident that the exposed population is not logically the same for all offenses or sub-offenses. Apart from the fact that the total population rarely should be thought of as potential victims of most crimes (even when population is the logical base for the crime, younger age groups are rarely victims of offenses involving persons), only some subgroups are clearly eligible for particular kinds of crime. To begin with, the exposed population for some offenses is women only. This is true for forcible rape, and for purse snatching, with (i.e., robbery) and without (i.e., larceny) force. The offense of pocket picking is generally defined as an offense against men, so that the logical base should be men. Indeed, among the UCR Part I offenses men and women are the logical, exposed population for only homicides, muggings and certain kinds of stick-ups, and assaults.

The logical exposed population for almost all other Part I offenses is an organization. For offenses of burglary, the organization is either a household unit (or residential dwelling) or a business-industrial organization. Indeed, police statistics often differentiate between a residential and a business burglary. The rate of residential burglary, for example, should be stated as the number of residences that were burglarized in relation to the number of residences that could have been burglarized, not the number of people residing in the area. Since the number of events, or the numerator, varies with the type of crime, the denominator should likewise vary, so that the whole number of exposures to the risk of that specific event are incorporated as the base.

For offenses of robbery, there is a distinct class involving banks. Apart from banks, many robberies are against business or organizations (secondary victimization) rather than against persons as victims (primary victimization²). The logical base,

^{2.} Primary victimization is used to refer to a personalized or individual victim, who may be directly assaulted and injured in a vis-a-vis offense, who is threatened, or has property stolen or damaged. Secondary victimization refers to commercial establishments such as department stores, railroads, theaters, chain stores, churches, and the like. The victim is impersonal, commercial, and collective, but is not so diffusive as to include the community at large.

therefore, for these robberies is organizations. A businessresidential land-use ratio was developed in this perspective by Boggs (1965) in Saint Louis as a base for business robbery. non-residential burglary, and grand larceny, since these offenses occur primarily in connection with the conduct of business and commerce. A count of the number of business classified by the degree of crime risk would have been a more sensitive measure for these offenses; the number of businesses estimated by this land-use measure was only a first approximation. People on the public streets, either pedestrians or occupants of vehicles, are the targets for highway (street) robbery. In the absence of a daytime census of population, number of square feet of streets was substituted by Boggs as the crime-specific base for highway robbery. Miscellaneous robbery, finally, is a residual category composed primarily of robberies of persons in and around their homes; therefore, the resident population was used by Boggs as the appropriate base. The most interesting result found by Boggs was that the standard rates per resident population showed the highway robbery rate as nearly twice as high as the business robbery rate, but that the crime-specific rates per environmental opportunities reversed the situation and indicated that the highway robbery rate was nearly three times lower than the business robbery rate.

We could not check Boggs' findings in Philadelphia, unhappily, because we did not have at our disposal comparable data on the business-residential land-use ratio or the number of square feet of streets. But we had for 1965 the estimated number of commercial establishments and households in Philadelphia, and we computed a few rates on this basis. The results are shown in Table 4, together with a comparison with Chicago, also for 1965, where the same types of denominators have been used by Reiss (1967). The conventional rates are also stated in this table.

Given the fact that some persons are robbed more than once in the same year, there is some over-estimation of the likelihood of victimization as stated in Table 4 in regard to rates per 10 000 resident population. Nonetheless, multiple victimization is considerably lower for robbery than for burglary³. When multiple victimization from robbery occurs in

^{3.} At least, from what we know of business robbery. See Reiss (1967, p. 82) who found, in a survey of business and organizations for eight police districts in Boston, Chicago and Washington (D. C.), for the period

TABLE 4	
Robbery rates per 10 000, by place of occurence : 196. Philadelphia and Chicago	5

Type of robbery		of	(specific	Ratio of 1 robbery to environmental opportunities
Philadelphia Highway Business Business Residence Residence Miscellaneous	2 052 000 °	2 893	14,0	709
	1 546 809 °	2 893	18,7	535
	1 546 809 °	1 383	8,9	1 118
	1 546 809 °	627	4,1	2 467
	39 910 °	627	157,4	64
	1 546 809 °	186	1,2	8 316
	790 582 ¢	186	2,4	4 244
	1 546 809 °	479	3,3	3 229
Purse snatching Purse snatching Chicago ^f	801 404 • 3 550 404 •	218 218 14 888	1,4 2,6 41,9	7 095 3 676 238
Highway Business Business Residence Residence Miscellaneous	2 630 047 b	14 888	56.6	177
	2 630 047 b	8 654	32,9	304
	2 630 047 b	1 782	6,8	1 475
	69 482 c	1 782	256.5	39
	2 630 047 b	2 164	8,2	1 215
	1 383 519 d	2 164	15,6	639
	2 630 047 b	2 888	11,0	911
United States	193 818 000 a	118 916	6,1	1 630
	137 496 000 b	118 916	8,6	1 156

a Total resident population, all ages.

the same year, it is most likely to occur for commercial establishments. Considering persons 14 years old and over, the likelihood that a resident of the United States would be a victim of robbery was one in 1 153 persons in 1965. In the city of Chicago. one in every 177 persons of these ages was a robbery victim, assuming no multiple victimization. One in every 537 persons was such a victim in Philadelphia.

In an important sense these probabilities are misleading, however. From the standpoint of the police, of course, a robbery is an offense regardless of the number of persons who are robbed whenever it is a distinct operation involving one or more robbers and one or more victims. The number of robberies.

b Total resident population, 14 years and over,

Number of business and commercial establishments.

d Number of households.

Female resident population, 14 years and over.

The data for Chicago are taken from Reiss (1967, p. 22). Reiss did not separate purse snatching from highway robbery, however, and he did not compute the rate and ratio for miscellaneous robbery. We are responsible for this computation. It must be mentioned that the place of occurrence of violent purse snatching is, obviously, on the street or highway.

July 1, 1965 to June 30, 1966, that 20 per cent of all organizations robbed had been robbed more than once, whereas 40 per cent of all organizations burglarized had been burglarized more than once.

however, necessarily underestimates the number of persons who are victims of robberies in the sense that some of their property was taken by force or at least they were threatened by loss of property in a robbery encounter. Neither the number of persons committing the offense nor the number of victims in the offense, then, determines the number of offenses; rather it is the operation or situation that determines whether it is an offense of robbery.

One way of attempting to estimate probability of victimization is precisely to compute rates for place of occurrence. At least for robberies in establishments, one can ask what the likelihood is that a robbery of an establishment will occur, or what the likelihood is that a robbery of a household will occur. The number of persons who are victims is not material to the definition of households or establishments.

From Table 4 it can be seen that the likelihood that a robbery would occur in an establishment (business, commerce...) in Philadelphia was considerably higher than the likelihood that a robbery would occur in or around residence premises. The rate is 157,4 per 10 000 establishments, whereas it is only 2,4 per 10 000 households. One in every 64 establishments was robbed, assuming no multiple victimization. (The figure may overstate victimization if Reiss' data on multiple victimizations are applicable to Philadelphia. This is open to an empirical investigation.) Yet, by comparison, only one in every 4 244 households was robbed, assuming no multiple victimization.

The likelihood of being robbed in public ways in Philadelphia is one in every 1118 persons 14 years old and over. The likelihood that a person of these ages will be robbed in or about a residence is about one-eighth as great, since one in every 8316 persons was a robbery victim in or about residential premises in Philadelphia. Assuming that the offense of robbery occurring in a residence is directed against the household, the likelihood of a household's being robbed was one in every 4244 households in Philadelphia in 1965.

Finally, let us mention that only one in every 3676 women aged 14 and over is a victim of a violent purse snatching during a year in Philadelphia.

In any event, assuming that robberies of business establishments are directed primarily against owners or employees who

are in direct contact with the public, the likelihood that a person will be robbed in such a role in Philadelphia is much greater than it is that he will be robbed in a citizen role, either in the streets or in or about residence settings.

These rates and ratios are considerably different in Chicago, because all of the Chicago rates, for any type of robbery, are from two to seven times higher than in Philadelphia. For example, the rate is 157,4 per 10 000 establishments in Philadelphia but 256,5 in Chicago. For residence robbery, it is 2,4 per 10 000 households in Philadelphia but 15,6 in Chicago.

The foregoing analysis and the data in Table 4 point up the difficulties in interpreting either rates of probabilities of victimization for robberies. Considerable attention should be given to separating robberies where persons are victims in public ways from those that occur in residence settings, and both, in turn, should be separated from what are essentially robberies of business establishments. It seems clear that the probability of victimization from a robbery is considerably greater if one operates a business — including particular types of business — than if one is in other settings. While it may be difficult to develop statistics that take account of multiple victimization, it may not be out of the question to count the number of victims in robbery offenses where the victim is in no way part of an establishment.

ECOLOGY, MOBILITY AND DISTANCE

It is not the purpose of this chapter to analyze the present data by means of an ecological approach. Such a research would require, probably, an entire study on the topic. A few words on some problems and related data are necessary, however.

Most ecological studies have concerned themselves with delinquency rather than adult crime patterns and have only rarely plotted the distribution of separate offenses, be it robbery or any other major crime. However, an intensive and detailed study of the distribution of different offenses known to the police (including robbery) and the residences of arrested persons has been pursued in Seattle (Schmid, 1960a and b). The data pertained principally to the three-year period 1949-1951, although some comparative data for the three-year period 1939-1941 and subsequently, 1959-1961, are also available (Schmid, 1967).

When the crime rates for the various census tracts of the city were correlated with each other, most of the offenses showed a varying degree of positive correlation with one another, indicating a tendency to follow somewhat similar patterns.

If we isolate Schmid's data on robbery per se, rather striking differences appear when the spatial distribution is analyzed. This can be seen in Table 5, where the number, per cent and the rate of robberies per 100 000 population are shown for the entire city, the central segment and the remainder of the city. The central segment contains a number of distinctive areas surrounding the central business district and the waterfront docks, warehouses, and railroad; it is also a « Skid Row » area of homeless men, a center for minorities, especially Negroes;

TABLE 5	
Distribution of crimes of robbery by place of occurrer in central segment of city, in remainder of city and in entire city: 1949-1951 (Seattle)	ice

T ();	Number		Rate per 100 000			Per cent		
Type of robbery	С	R	E	C	R	E	C	R
Robbery, highway	559	271	830	247	23	59	67	33
Robbery, non-residential	179	208	387	79	18	28	46	54
Purse snatching	139	132	271	61	11	19	51	49
Robbery, residential	158	43	201	70	4	14	79	21
Other forms of robbery	106	15	121	47	1	9	88	12

C: Central City. R: Remainder of city.

E : Entire city.

Source: Schmid, 1960b, p. 658.

transitional residences and rooming houses, some predominant working and middle class dwellings and apartment houses; automobile sales and services and other commercial business establishments; and some warehouse and light industry districts.

For all of the types of robbery listed as a group, the risk is almost nine times greater in the central segment. To some extent, of course, these differences are exaggerated because the rates are based on resident population, and many persons who become victims of crime in the central segment are transients who could not be represented in the resident population count.

The risk of victimization for all the major crimes is greatest in Seattle also for those who visit or reside in the central segment of the city. The difference in risk ranges all the way from 27 times greater in « theft from the person » to less than a third greater in the offenses of « peeping tom » or «obscene phone calls ».

The percentage figures in Table 5 also help to show the variations in concentration of crimes in the central segment. This central segment contained only 15,5 per cent of the city population in 1950 and 10,8 per cent of the area of the city. Yet, it contributes to 63 per cent of all types of robbery, including purse snatching and non-residential robbery. It accounts for 88 per cent of miscellaneous forms of robbery, 79 per cent of residential robbery and 67 per cent of highway robbery.

When Seattle is divided into six one-mile zones radiating out from the city's center, the usual pattern of high rates in the central zones and low rates on the outskirts is shown for most crimes. Robbery also conforms to the typical centrifugal

crime gradient pattern with relatively high rates in the central zone and low rates toward the periphery.

The rates of offenses known to the police tend to decrease with increasing distance from the city center, even when concentric zones are extended beyond the city limits of a metropolitan community into its commutation zone and area of dominance. The major exceptions to this pattern, found by Lottier (1938a, b and c) in his investigation of areas included within a 200-mile radius of Detroit, occurred in those zones which contained large industrial and commercial satellites. In these zones, the rates exceeded those of the preceding zones, ostensibly because of the existence of conditions that approximate those at the city's center.

However, not all offenses followed this pattern neatly. It became apparent that the gradient offenses involved persons and the nongradient offenses involved property. There was a definite gradient pattern in the distribution of robbery per se. This gradient was even more ideal when Lottier computed robbery rates based upon units of property rather than units of population (for example, he computed a ratio of chain store robberies to number of chain stores in each zone). In fact, when this opportunity factor was taken into account for property offenses (burglary, larceny and auto theft), this crime category as a whole conformed more closely to the gradient. Lottier sought the explanation of the gradient in ecological processes, especially the gravitation of criminal activity, such as business activity, toward the center of the city where the greatest exploitation of communication and contacts occur.

Our own data in Philadelphia on robbery occurrence rates by areas are limited mainly to police districts and census tracts. Schmid's study, on the contrary, had the advantage of being based on the technique of social area analysis which is a means for locating, within a larger area, units which are similar on a number of population characteristics. The social area typologies mainly utilized by those interested in the distribution of crime rates, including Schmid, have been the Shevky-Bell typology and the Tyron typology.

Be it as it may, if we rank the Philadelphia police districts according to the proportion of robberies committed in these districts, we see clearly that occurrences of robbery are distributed mainly in the center city of Philadelphia, as shown by

TABLE 6

Distribution of crimes of robbery and total major crimes by police districts: 1960-1966 (average)

Philadelphia sample

Police district number	Rank of district in robbery	District proportion in robbery	Rank of district in total major crimes	District proportion in major crimes
1	19	0,9	21	1,3
2	19	0,9	17	2,2
3	15	1,8	17	2,2
1 2 3 4 5 6 8 7 9 8	17	1,1	20 22 2 16 3 15	1,6
5		0,2	22	0.8
6ª	3	8.3	2	7,7
7	23 3 22 5	0. 4	16	2.4
9 a	5	7.7	3	7,4
12	14	2.2	15	3.3
14	12	2,6	10	4,9
15	16	1.5	14	3,7
16	11	4.8	11	4.0
17	9	4,9	12	3.8 7.4
18 19	6	6,7	3	7,4
19	9 6 9 1	4,9	8	5,6 10,6
22 B	1	17,3	12 3 8 1 6	10.6
23 ·	2	11,0	6	6,6
24 25 26 a	19 8	0.9	19	1.8
25	8	5,1	9	5.4
26 a	4	8.2	5	7.3
35	13	8.2 2,3 5,3	19 9 5 12 7	38
39 89-95 b	.7	5,3	7	5.7
89-95 b	18	1,0	23	0,5

^a Center city.

Table 6. There is a similar, concentrated distribution for robbery by census tracts. Rates per 10 000 population in these districts and census tracts also conform to this profile.

The five leading police districts in the central segment of Philadelphia had a combined population in 1960 of about 450 000 inhabitants: 300 000 Negros and 150 000 whites. Although this population represents 22.5 per cent of the total Philadelphia population, 55 per cent of the Negroes and 15 per cent of the whites in the city live in these five districts which account for 52,5 per cent of all robberies committed in Philadelphia.

In describing the distribution of crime and delinquency rates by city areas, one can calculate the area rates on the basis of where the offense took place or where the offender resided. These procedures produce different pictures of the distribution of the crime problem. The procedure to use depends on the purpose of the study. Where the principal interest

b Parks.

has been to show which areas bear the greatest burden of crime or present the most attractive opportunities for various types of crime, area of occurrence of the offense, utilizing reports on offenses known to the police, has been the appropriate choice. Where the main interest is in identifying the characteristics of areas which house or produce the most criminals, then area rates are calculated on the basis of the apprehended offender's place of residence.

When both of these procedures are used and the two resulting pictures of the crime problem are compared, it is possible to see the different types of contribution to the crime problem which different areas of the city make. At the same time, it is possible to secure a sense of the mobility of offenders in search of different types of criminal opportunities. This type of comparison, using Philadelphia juvenile data, has been done most interestingly by Turner (1969). The author found that the map of offense areas was somewhat similar to the map of offender areas. He showed that when offenders travel to commit an offense they do not travel far. Most of their offenses are committed close to their homes. Thus, offense areas tend to be offender areas. But those who do travel outside an offender area are again more likely to travel only a short distance. This implies that areas that are high in offenses but low in offenders occur around the borders of high offender areas. When offenders travel outside their offender areas, the ecological distribution of delinquency by distance from offenders' residences to places of occurrence is not random. A « random walk » in terms of distance or in terms of distribution failed to fit the observed data. There was a radial area of acquisitive crime attractiveness to the downtown or center section of Philadelphia, which is an area of relatively low juvenile population, lying between three high offender areas, while it has many commercial establishments and recreational facilities and is the most accessible section of the city.

This type of comparison by individual offense has also been made by Schmid (1960a). The results demonstrate clearly that the central segment and the remainder of the city of Seattle differ considerably in the rate with which they contribute either criminal opportunities or criminals for different types of offenses. For example, 41 per cent of the persons arrested

36

for robbery resided in the central segment, while 63 per cent of the robberies occurred there. This suggests that some robbers seek the greater opportunity and anonymity of the central segment when their area of residence is some place else. This finding stands in notable contrast to such forms of fraud as bunco, confidence game, and swindling, since 63 per cent of these crimes were reported to occur in the central segment, while 74 per cent of those arrested for these offenses resided there.

Our own data on robbery in Philadelphia indicate that 45 per cent of the persons arrested for robbery resided in the five leading police districts in the central segment of Philadelphia, while 52,5 per cent of all robberies were committed there.

The degree to which the mobility of the offender varies for different offenses, especially in regard to robbery, is addressed more directly in recent data reported from Washington and Seattle.

For all criminal acts, excluding traffic offenses, 15,3 per cent of the persons arrested in the entire Washington (D. C.), metropolitan area in 1965 were non-residents of the place where arrested. For the crimes against the person (homicide, rape and assault), 10 per cent of the persons arrested were non-resident offenders. While 9 per cent of the robbery arrests were of non-residents, 19 per cent of the persons arrested for property crimes (burglary, larceny and auto theft) were non-residents of the community where the crimes were committed.

The mobile robbery offenders were primarily from some part of the metropolitan area (64 per cent), although they traveled to another political subdivision of the area to commit their criminal acts. Fourteen per cent came from a state other than Maryland and Virginia and the District of Columbia. Twenty-two per cent were from Maryland or Virginia but resided beyond the suburban fringe. The Maryland and Virginia suburbs of this metropolitan area experienced proportionately a greater degree of criminal mobility than the large, core city, Washington (D. C.). For example, only one-half of arrested robbers in the suburbs were residents of the community where the crime occurred.

This survey in the Washington (D.C.) metropolitan area also revealed that 21 per cent of the victims were non-

residents of the community in which the crime was committed. Comparable percentages were 15 per cent for crimes against the person, 22 per cent for robbery and 30 per cent for crimes against property. Transient victims of robbery were higher in the large city compared with the suburbs.

Of course, it is reasonable to assume that a greater proportion of unsolved crimes are committed by mobile offenders. However, it is clear that the vast majority of offenders and victims in major crimes, as well as in robbery, are of local concern in Washington (D. C.).

The study in Seattle compared the census tract of occurrence of the offense with the tract of residence of the offender for 19 327 persons arrested in Seattle in 1965 (Reiss, 1967). Table 7 shows for the major offense categories whether the offender resided in the same tract in which he committed his offense, whether he resided elsewhere in the city, or whether he resided outside the city.

In Seattle, offenders were much more likely to move out of their neighborhood in connection with crimes against property than in crimes against persons, save for rape. Robbery follows the pattern of crimes against property in this respect, with only 29 per cent of the places of offenses and residences of the offenders in the same census tract. In Philadelphia, 33 per cent of the offenders lived in the same tract of places of crime occurrences. More than one-half (53 per cent) of the robbers in Philadelphia reside in the same census tract or in adjacent and contiguous tracts.

These findings corroborate the general conclusions drawn from a study of residence of offender and place of occurrence of offense carried out in Indianapolis in 1931 (White, 1932). The data, based on all cases disposed of in a Criminal Court, made it possible to measure on a map the distance from the center of the residence census tract to the center of the offense census tract for the 481 cases shown for different offenses in Table 8. The mobility patterns for different offenses do not seem greatly different in Seattle 35 years later, though the data are not exactly comparable.

In Philadelphia, the robbery median and mean distance in miles from the place of residence of an offender and the place of his offense were calculated by way of a « taxicab measure » from the event to the residence. A map measure (watch pattern)

TABLE 7
Comparison of place of offense and residence of offender for parts I and II crimes : 1965
Seattle (in percent)

	Resid	dence of arrested of	ender
		elsewher e	outside
Offense charged on arrest	same tract	Seattle	Seattle
Forcible rape	15	69	16
Assault to rape, attempts	54	38	8
Robbery	29	53	12
Aggravated assault	35	47	8 12 14
Other assaults	42	45	10
Burglary, breaking or entering	26	59	12
Larceny, theft	13	68	14
Auto theft	13	68	17
Arson	40	57	14 17 3 17
Forgery and counterfeiting	20	59	17
Fraud	19	47	28
Embezzlement	18	45	28
Stolen property buying,			
receiving, possessing	27	54	16
Vandalism	27	60	12
Weapons, carrying,			
possessing, etc.	15	65	14
Prostitution and			
commercialized vice	34	59	-3
Other sex offenses	30	51	16
Narcotic drug law	4 1	4 3	11
Gambling	14	69	9
Offenses against family			
and children	67	33	0
Driving under the influence	13	64	20
Liquor laws	38	43	13
Drunkeness	33	4 8	6
Disorderly conduct	27	5 5	12
Vagrancy	26	61	4

Source: Reiss, 1967, p. 21.

TABLE 8

Distance between offender's residence and place of offense for specific crimes: 1930 (Indianapolis)

Crime	Number of cases	Mean distance (miles)
Against person	37	0.84
Rape	11	1,52
Assault & battery	16	0.91
Manslaughter	9	0,11
Against property	44 4	1,72
Auto banditry	9	3,43
Embezzlement	21	2,79
Robbery	20	2.14
Vehicle taking	76	1,77
Burglary	121	1.76
Grand larceny	117	1,53
Obtaining money falsely	38	1.47
Petty larceny	25	1.42

Source: White, 1932, p. 507.

was used, consisting of taking the shortest estimated route that a taxicab could use from the place of the event to the offender's residence. Distance was read off from a measuring wheel to the nearest unit. White's method of measuring the distance from the center of the tract of occurrence to the center of the tract of residence was not used here because an offense committed by an offender in the census tract of his residence would be given a distance of zero, even though he might travel an appreciable distance within a census tract. Furthermore, the size of a census tract is inversely related to the size of its population.

TABLE 9

Distance between offender's residence and place of offense in crimes of robbery: 1960 to 1966 (average)

Philadelphia sample

Miles (in tenth) Cum f Cum p Cum p Miles (in tenth) Cum f Cum f p .1 19 19 ,024 ,024 2,1 11 610 ,01 .2 27 46 ,034 ,058 2,2 16 626 ,020 .3 28 74 ,036 ,094 2,3 14 640 ,018 .4 35 109 ,045 ,139 2,4 13 653 ,015 .5 38 147 ,049 ,188 2,5 11 664 ,014 .6 38 185 ,049 ,237 2,6 14 678 ,018 .7 47 232 ,060 ,297 2,7 11 689 ,014 .8 51 283 ,065 ,362 2.8 15 704 ,019 .9 42 325 ,054 ,416 2.9 8 <	3 ,801 3 ,819 7 ,836 4 ,850 3 ,868
	4 ,781 0 ,801 8 ,819 7 ,836 4 ,850 8 ,868
.1 19 19 ,024 ,024 2.1 11 610 ,01 .2 27 46 ,034 ,058 2.2 16 626 ,020 .3 28 74 ,036 ,094 2.3 14 640 ,014 .4 35 109 ,045 ,139 2.4 13 653 ,015 .5 38 147 ,049 ,188 2.5 11 664 ,01- .6 38 185 ,049 ,237 2.6 14 678 ,014 .7 47 232 ,060 ,297 2.7 11 689 ,01-	3 ,801 3 ,819 7 ,836 4 ,850 3 ,868
,2 27 46 ,034 ,058 2,2 16 626 ,020 ,3 28 74 ,036 ,094 2,3 14 640 ,014 ,4 35 109 ,045 ,139 2,4 13 653 ,011 ,5 38 147 ,049 ,188 2,5 11 664 ,011 ,6 38 185 ,049 ,237 2,6 14 678 ,011 ,7 47 232 ,060 ,297 2,7 11 689 ,011	3 ,801 3 ,819 7 ,836 4 ,850 3 ,868
.3 28 74 ,036 ,094 2,3 14 640 ,011 .4 35 109 ,045 ,139 2,4 13 653 ,011 .5 38 147 ,049 ,188 2,5 11 664 ,014 .6 38 185 ,049 ,237 2,6 14 678 ,014 .7 47 232 ,060 ,297 2,7 11 689 ,014	8 .819 7 .836 4 .850 3 .868
.4 35 109 ,045 ,139 2.4 13 653 ,01 .5 38 147 ,049 ,188 2.5 11 664 ,01 .6 38 185 ,049 ,237 2,6 14 678 ,01 .7 47 232 ,060 ,297 2.7 11 689 ,01	7 ,836 4 ,850 3 ,868
.5 38 147 .049 .188 2.5 11 664 .01 .6 38 185 .049 .237 2.6 14 678 .018 .7 47 232 .060 .297 2.7 11 689 .019	868,
.6 38 185 ,049 ,237 2,6 14 678 ,018 ,7 47 232 ,060 ,297 2.7 11 689 ,019	
,7 47 232 ,060 ,297 2,7 11 689 ,014	.882
,8 51 283 ,065 ,362 2.8 15 704 ,019	
,9 42 325 ,054 ,416 2,9 8 712 ,010	,911
1,0 44 369 ,056 ,472 3,0 7 719 ,009	.920
1,1 32 401 ,041 ,513 3,1 3 722 ,004	,924
1.1 32 401 .041 .513 3.1 3 722 .004 1.2 26 427 .033 .546 3.2 2 724 .003 1.3 25 452 .032 .578 3.4 3 727 .004 1.4 21 473 .027 .605 3.5 1 728 .001	,927
1.3 25 452 ,032 ,578 3,4 3 727 ,004	
1.4 21 473 .027 ,605 3.5 1 728 ,001	
1,5 19 492 ,024 ,629 3.6 2 730 ,003	
1.6 20 512 ,026 ,655 3.7 2 732 ,003	
1,0 44 369 ,056 ,472 3.0 7 719 ,000 1,1 32 401 ,041 ,513 3,1 3 722 ,004 1,2 26 427 ,033 ,546 3,2 2 724 ,005 1,3 25 452 ,032 ,578 3,4 3 727 ,006 1,4 21 473 ,027 ,605 3,5 1 728 ,001 1,5 19 492 ,024 ,629 3,6 2 730 ,003 1,6 20 512 ,026 ,655 3,7 2 732 ,003 1,7 24 536 ,032 ,687 3,8 2 734 ,003 1,8 22 558 ,028 ,715 3,9 1 735 ,001 1,9 22 580 ,028 ,743 4,1 3 738 ,004 2,0 19 599 ,024 ,767 4,3 2 740 ,003 4,6 3 745 ,004 ,956 4,4 2 742 ,003 4,9 <	
1.8 22 558 ,028 ,715 3.9 1 735 ,001 1.9 22 580 ,028 ,743 4.1 3 738 ,004	,942 ,946
1.9 22 580 ,028 ,743 4.1 3 738 ,004 2.0 19 599 ,024 ,767 4.3 2 740 ,003	,949
4,6 3 745 ,004 ,956 4,4 2 742 ,003	
4.9 1 746 ,001 ,957 17,7 2 769 ,003	
5.1 1 747 ,001 ,958 20,1 1 770 ,001	,989
5.2 2 749 ,003 ,967 21.4 1 771 ,001	,990
58 1 750 ,001 ,962 23,4 1 772 ,001	
63 1 751 001 963 25.4 1 773 001	
6 9 2 753 ,003 ,966 29.1 1 774 ,001	
7.5 1 754 ,001 ,967 30.4 1 775 ,001	,994
76 2 756 ,003 ,970 34.4 1 776 ,001	,995
82 1 757 ,001 ,971 368 1 777 ,001	,996
89 1 758 ,001 ,972 41.7 1 778 ,001	,997
98 1 759 ,001 ,973 48 1 1 779 ,001	,998
11.1 2 761 ,003 ,976 53.3 1 780 ,001	,999
12.1 1 762 ,001 ,977 54,1 1 781 ,001	1,000
12 7 1 763 ,001 ,978	
13.5 2 765 ,003 ,981 Total: 781 781 1,000	1,000
14 6 1 766 ,001 ,982 Median : 1,07 miles	
15.4 1 767 .001 .983 Mean: 1,57 miles	

The data, in the form of the cumulated percentage of cases as a function of distance, are presented in Table 9. They are presented in units of one-tenth of a mile. The median distance traveled, was 1,07 miles and the mean was 1,57 miles. This mean distance is significantly lower than in Indianapolis (2,14 miles). The range is from a few feet to 54 miles.

In his study of juvenile delinquency in Philadelphia, Turner found that the median distance traveled was about 40 per cent of a mile. Three-fourths of the events took place within a distance of about one mile, the range being from zero units to 23 miles. In the main, two facts stood out, First, most juvenile offenders lived a short distance from the place of their offenses. The assumption that a preventive action program in given areas would be expected to reduce the delinquency rate of these areas more effectively if it could be shown that the offender goes only a small distance to commit his offense, is thus asserted to be more plausible in the case of juveniles. Our robbery data, we now know, do not conform closely to this result because many offenders live a certain significant distance from the scene of the crime. This difference remains even when we separate adult from juvenile offenders, although the distance is lower in the case of juveniles. In effect, the median distance in miles is about 0.95 of a mile for juveniles, whereas it is 1,14 miles for adult robbers. It seems, thus, that the robber travels somewhat farther than persons in other crimes of violence in order to find a victim unknown to him. This is true, in fact, not only for robbery, but for all crimes against property, as was shown by Reiss' data in Seattle, by White's data in Indianapolis, and by Turner's data for juveniles in Philadelphia when he divided the juvenile events into injury and theft events. Data on homicide in Houston, for the period 1945-1949, also buttress these comparative findings because 57 per cent of the offenders lived within half a mile of the place of offense (Bullock, 1955).

Second, Turner discovered, that the proportion of offenses distinctively and progressively waned with distance with respect to juvenile delinquency in Philadelphia. This pattern is also definitively present with respect to robbery in Philadelphia.

A comparison of crime data and distance with the findings of other social phenomena where distance plays a role is also given by Turner, and it shows that the geometry and sociology of situations like migration, message diffusion, choice of a marital partner, etc., show a good deal of similarity to crime studies of similar type.

The same map measure technique was also used with respect to our robbery data to measure a) the distance from the offender's residence to the victim's residence and b) the distance from the place of the event to the victim's residence. The results indicate a median distance of 1,61 miles between home addresses of arrested persons and victims, and of 1,88 miles from events to victim addresses. Victims in robbery are thus living farther from places of occurrence than offenders. Table 10 summarizes these results.

TABLE 10

Distance between offender's and victim's residence and place of offense in crimes of robbery: 1960 to 1966 (average)

Philadelphia sample

Distance between	Median Mea (in miles)	
a) Offender's residence and place of offense	1,07	1,57
b) Victim's residence and place of offense	1,88	2,31
c) Offender's residence and victim's residence	1.61	2,19

These data can be compared with homicide in Houston for the periods 1945-1949 and also, partly, for 1958-1961 (Bullock, 1955, 1962):

Distance between	Median (in miles) 1945-1949 1958-1961	
a) Offender's residence and place of offense	0.45	
b) Victim's residence and place of offense	0,40	_
c) Offender's residence and victim's residence	0,65	0,17

It shows, once more, that distances are much greater in robbery than in crimes of violence such as homicide.

That victims in robbery live farther is reflected further by data on census tracts which show that fewer victims than offenders live in the same census tract than in places of crime occurrences, especially when adjacent tracts are taken into account, as shown in Table 11.

It may be interesting here to compare offense, offender and victim together in terms of the following combinations:

1) « Crime neighborhood triangle »: The place of offense and

TABLE 11

Comparison of place of offense and residence of offender and victim in crimes of robbery: 1960 to 1966 (average)

Philadelphia sample (in percent)

	Same tract	Elsewhere Philadelphia	Outside Philadelphia	Totai
Offender-offense	32,7	56.2	11,1	
Victim-offense	31.5	60.2	8,3	100,0
Offender-victim	26,0	72.8	100,0	
	Same or adjacent tracts	Elsewhere Philadelphia	Outside Philadelphia	Total
Offender-offense	52.5	36,4	11,1	100,0
Victim-offense	43,6	48,1	8,3	100,0
Offender-victim	38.3	60,6	1,2	100,0

the residences of both the offender and the victim are in the same census tract (or adjacent and contiguous tracts).

- 2) « Offender mobility triangle »: The offender does not live in the same tract (or adjacent tracts) as the place of offense and the residence of the victim, which are both in the same tract.
- 3) « Victim mobility triangle »: The victim does not live in the same tract (or adjacent tracts) as the place of offense and the residence of the offender, which are both in the same tract.
- 4) « Offense mobility triangle »: The offense does not occur in the same tract (or adjacent tracts) as the residences of the offender and the victim, which are both in the same tract.
- 5) « Total mobility triangle »: The place of offense, the residence of the offender and the residence of the victim are all in different tracts.

TABLE 12

Comparison of place of offense and residence of offender and victim in crimes of robbery as to mobility triangle: 1960 to 1966 (average)

Philadelphia sample

me act	Same or adjacent tracts	
4.1	17,9	
7,4	19,1	
8,6	21,7	
1,9	15,2	
8,0	26,1	
0,0	100,0	
81)	(781)	
}	7,4 8,6 1,9 38,0 00,0 81)	

Table 12 gives us the necessary information. We see that a total mobility pattern is prevalent (38,0 per cent) while the offense mobility pattern is not very frequent (11,9 per cent). when we use the « same tract » definition. When we extend our definition to «adjacent and contiguous tracts », the total mobility triangle is considerably reduced, whereas the other triangles each increase their proportion of cases. Still, only less than one-third are of the crime neighborhood triangle type, whereas Amir (1965), in his study of rape in Philadelphia, found, for example, that more than two-thirds of his cases were of the neighborhood type. He did not use tracts, however, but he defined neighborhood triangle as an area of five city blocks. It is obvious that his percentage would have been even higher if he had used tracts because the latter unit is much larger. It appears also that contrary to robbery, homicide occurs in certain areas of the city, and that the offenders and victims in homicide live much more often, not to say almost always, in these same areas. Pokorny (1965a), for example, found, for 120 census tracts in Houston, correlations of 0.94, 0.96 and 0.95, respectively, for the relationships between homicide offenders and homicide victims, homicide offenders and places of occurrence, and homicide victims and places of occurrence. In 64,4 per cent of his cases, both parties lived in the same census tract.

All in all, it thus seems obvious that distances in robbery between places of occurrence and offenders' and/or victims' residences are much greater (calculated in miles and/or by similarity of census tract) than in other crimes of violence such as homicide, rape and aggravated assault.

Let us, finally, look at some relationships of robbery to social indicators in studies other than ours.

We talked, in the previous chapter, of crime occurrence rates in terms of environmental opportunities on a city-wide basis. Using these crime-specific occurrence rates on a city-census tract basis, one could determine whether crime targets in certain areas are exploited at higher rates than targets in other neighborhoods. The first question, in such a perspective, would be whether the rate in each offense category is associated with the presence of offenders who commit these crimes, and the second, whether the social-structural characteristics of resident populations vary among different offense areas.

Environmental opportunities for crime vary from neighborhood to neighborhood. Depending on the activities pursued in different sections of the city, the availability of such targets as safes, cash registers, dispensing machines, people and their possessions varies in amount and kind. These differing opportunities should be reflected in the occurrence rates.

If opportunities in the offenders' own neighborhood are exploited at high rates, then the variables traditionally associated with the prevalence of offenders in the social structure, namely low social class, non-white status, and anomie will also be associated with crime occurrence. But if crime targets in other areas are more intensively exploited than they are in offenders' neighborhoods, then these structural characteristics may not appear in high-occurrence areas.

Boggs (1965) has done such an analysis in Saint Louis. All of the major crimes in 1960, along with the various riskgroup measures, were allocated to the 128 census tracts in Saint Louis so that crime-specific and standard occurrence rates could be computed for each of the offenses for each of the census tracts. The most radical differences between the rates were among the business crimes, for which rank order correlations between the two sets of rates were quite low. Business robbery had such a low coefficient (r = 0,33). Contrary to the traditionally high standard crime occurrence rates, rates of business robbery were low for business areas when the rates were computed on the basis of environmental opportunities. Highway robbery, contrariwise, had а high coefficient (r = 0,77). Comparing offense specific rates with offender rates by census tracts, Boggs found that the presence of robbers is uncorrelated with the occurrence of the crime of business robbery but that occurrence rates were moderately associated with the corresponding offender rates for highway and miscellaneous robbery, indicating that opportunities are exploited at higher rates in neighborhoods that have high offender rates for the latter types of robbery. In business robbery, contrariwise, the most intensively exploited business crime targets are those located in high-rank neighborhoods adjacent to offender areas; these targets are potentially more profitable than similar targets in low-rank areas.

The discovery of relatively stable and systematic variations in the distribution of crime rates among the geographical areas of the city, from Shaw and McKay's earlier studies to Boggs' refined findings, has led to a constant search for the distinctive social and economic characteristics of the high as compared to the low crime rate areas. If it should be found that high crime rate areas have a typical and distinctive social structure, then it would be possible to identify and study in greater detail the specific social processes which produce the variations in crime rates. Such exploration might also provide useful indications of the direction which crime prevention and control programs should take to be most effective.

Thus, a major part of the research effort concerning the distribution of crime rates within cities has tried to establish the relation between these rates and other features of urban areas. In general, there has been a considerable amount of agreement among the various studies as to the social and demographic characteristics of areas which are most closely associated with crime. In part, this agreement is attributable to the fact that correlations have been made with total rates of crime or delinquency based on the offender's residence. When the crime rates are based on offenses known to police, rather than on arrest or court appearance, the factor of opportunity at the place of occurrence of the crime comes more into focus, and somewhat different area characteristics emerge as most important.

Rare are the studies, however, which isolate robbery as such. Schmid's study (1960b) is one of these and some of his data are presented in Table 13.

Table 13 shows the degree of relationship between 18 social and demographic variables for census tracts and the rates for robbery and indecent exposure offenses known to the police, which were 2 of the 20 offenses analyzed in the study that showed clear differences in distribution.

Robbery offenses are most likely to occur in areas characterized by a high percentage of unemployed males, a high percentage of males, a low level of school grades completed, a low percentage of persons in the 14-years-and-over population who are married, and a low level of median income. Indecent exposure, however, is more likely to occur where there is a high percentage of females in the labor force, a low number of children per 1 000 females in the area, a low percentage of dwelling units built prior to 1920 and 1930. Thus, the two

ACTA CRIMINOLOGICA

TABLE 13

Intercorrelation of crime of robbery and indecent exposure rates and social and demographic variables: 1949-1951 and 1959-1961

Seattle

			Offenses kno	wn to the police	
	Social and demographic variables	robbery (1949-1951)	robbery (1959-1961)	indecent exposure (1949-1951)	indecent exposure (1959-1961)
1.	Percent male unemployed	,85	,70	.08	,27
2.	Percent male	,84	,80	— .11	,07
3.	Percent 60 years old and over	,4 6	,4 6	,25	,30
4.	Percent dwellings units built prior to 1920 or 1930	,44		,31	
5.	Percent laborers	,38	,56	,06	,10
6.	Percent foreign-born white	,32	,53	,15	,08
7.	Percent Negro	,32	,19	و0, —	,15
8.	Percent living in different country 1940-1950	,28		,22	
9.	Percent females in labor force	,13	,16	,44	,23
10.	Population growth and decline 1940-1950 or 1950-1960	 ,14	,34	 ,2 9	
11.	Number children per 1 000 females	 ,20	,23	— ,34	
12.	Percent proprietors and managers	— ,33		 ,20	
13.	Percent professional workers	— ,33	,33	11	,13
14.	Dwelling units with television	— ,42		,21	
15.	Percent dwellings units owner-occupied	— ,44	50، —	,35	— ,29
16.	Median income	53	— ,49	,2 4	 ,34
17.	Percent of 14 years of age and over, married	 ,5 5	,57	,29	— ,35
18.	Median grade completed	— ,5 6	 ,55	,08	— ,1 1

Source: Schmid, 1960b, p. 673, and Schmid and Tagashira, 1967, p. 4.

characteristics, per cent male unemployed and per cent male, that best describe the high risk robbery areas are not descriptive at all of areas of high risk for the offense of indecent exposure. Similarly, the best descriptive factor for areas most subject to the offense of indecent exposure, per cent females in the labor force, has little value in characterizing robbery prone areas.

It is worth mentioning that as a result of a factor analytic study of his data, Schmid isolated a factor which represented the « urban crime dimension par excellence ». This factor, named « low family and economic status » had high loadings on proportion of unmarried and unemployed males, and on rates of common drunkenness, larceny, fighting and robbery.

In any case, the steps for another study on robbery in Philadelphia, in the future, might well focus its attention primarily on these ecological parameters which are still to be unraveled.

PREVIOUS RECORD: SUBCULTURE OF VIOLENCE OR SUBCULTURE OF THEFT?

Wolfgang and Ferracuti (1967, p. 99-100) have recently written about the subculture of violence in the following perspective:

A subculture implies that there are value judgments or a social value system which is apart from and a part of a larger or central value system. From the viewpoint of this larger dominant culture, the values of the subculture set the latter apart and prevent total integration, occasionally causing open or covert conflicts. The dominant culture may directly or indirectly promote this apartness, of course, and the degree of reciprocal integration may vary, but whatever the reason for the difference normative isolation and solidarity of the subculture result. There are shared values that are learned, adopted, and even exhibited by participants in the subculture, and that differ in quantity and quality from those of the dominant culture. Just as man is born into a culture, so he may be born into a subculture.

These authors further maintain that such a subculture exists precisely in regard to violence and is partly demonstrated by examination of the social groups and individuals who experience the highest rates of manifest violence. As they put it, « from this subculture... come most violent crimes like homicide, rape, robbery, and aggravated assaults » (p. 298).

Robbery is thus mentioned by Wolfgang and Ferracuti as a reflection of this subculture of violence and it is our purpose here to look at some of our data on robbery in this perspective, which is far from being a valid test of these authors' theory.

First of all, let us divide our sample of arrested robbers into two groups: violent and non-violent robbers. Violent rob-

bers refers to offenders who have used violence in their present offenses of robbery in such a way as to force the victims to be treated and discharged or hospitalized. Offenders responsible for a minor injury have not been categorized as « violent » because many of these minor injuries are the result of pushing and purse snatching and would thus blur the meaning of our dichotomy. The hypothesis is that more violent robbers will have a previous arrest history stamped with the mark of violence than will non-violent robbers. As Wolfgang proposes, "future research should compare the proportion of criminal offenders having a previous record of assaults with the proportion of offenders of other types of crime who have a record of assaults. Such a comparison could prove of considerable value for quantitatively measuring what logically appears to be, from inspection of the frequency distributions, a significantly high proportion of homicide offenders with a previous record of assaults » (1958, p. 171). A social correlate of this hypothesis, based on Wolfgang's study of homicide in Philadelphia, would be that Negroes have been more violent in their past than whites and are thus a living reflection of this subculture of violence.

As in previous studies similar to ours, we will use, primarily, arrest or police records rather than conviction or court records and commitment or prison records. Of course, this arrest index, because it is a product of official records, does not account for all the crimes committed by the subject in his criminal career. No offender is apprehended for every crime he commits; if apprehended in many different police jurisdictions, his complete apprehended career is not always retraceable in its entirety; and, obviously, the offender may not be guilty of all the crimes with which he is charged. One further limitation concerns the impossibility of distinguishing the seriousness of a past crime because the legal label only is specified. It may be a more or less serious robbery or rape; we know only that a robbery or rape was committed. However, the principal advantage in the use of arrest records stems from the fact that the further one gets from a criminal's arrest history, the more obscure and distorted become the facts of his criminal activities.

Table 14 reveals that a low proportion of victims but a high proportion of violent and non-violent robbers have a previous police or arrest record.

Only 8 per cent of the victims have a previous arrest

ACTA CRIMINOLOGICA

TABLE 14

Victims and offenders with a previous arrest record in crimes of robbery by race and sex: 1960 to 1966 (average)

Philadelphia sample (in percent)

	Total	Both races Male	Female	Total	Negro Male	Female	Total	White Male	Female
Victims	92,1	91,3	96.6	90.7	89,4	96,4	95.2	94.7	96,9
No record	7,9	8,7	3.4	9.3	10,6	3,6	4,8	5,3	3,1
Record	100,0	100.0	100.0	100.0	100,0	100,0	100,0	100.0	100,0
Total	(1 785)	(1 303)	(482)	(1 179)	(911)	(268)	(606)	(392)	(214)
All robbers	16,2	15,1	37,3	13,7	12,3	36,7	30.2	29.8	(4) a
No record	83,8	84,9	62,7	86,3	87,7	63,3	69.8	70.2	(0)
Record	100.0	100.0	100,0	100,0	100,0	100,0	100.0	100.0	100,0
Total	(892)	(847)	(45)	(755)	(714)	(41)	(137)	(133)	(4)
Violent robbers No record Record Total	13.7 86,3 100.0 (152)	10,4 89,6 100,0 (144)	(3) a (5) 100,0 (8)	12,9 87,1 100,0 (131)	10,1 89,9 100,0 (123)	(3) a (5) 100,0 (8)	18,3 81,7 100,0 (21)	18,3 81,7 100,0 (21)	 100,0 (0)
Non-violent robbers	16,7	17,9	34.9	14,1	12,9	35,9	30.5	29.1	(4) a
No record	83,3	82,1	65.1	85,9	87,1	64,1	69,5	70,9	(0)
Record	100 0	100,0	100.0	100,0	100,0	100,0	100,0	100,0	100,0
Total	(740)	(703)	(37)	(724)	(591)	(33)	(116)	(112)	(4)

^{*} Category too small for breakdown by percentage distribution. The raw number is indicated in parentheses.

record, whereas 84 per cent of the offenders have such a record. There is no significant difference among victims across race and sex, although Negroes have a prior record more often than whites, and male more often than female victims. There are some significant differences among offenders, however, across race as well as sex: Negro offenders have a past record 86 per cent of the time but white offenders 70 per cent of the time; male offenders have a prior record 85 per cent of the time but female offenders 63 per cent of the time.

When comparing violent with non-violent robbers, we see that the violent robbers have a slightly higher percentage of prior arrest records than non-violent robbers: 86 per cent versus 83 per cent. The difference is not significant, obviously. The race and sex differential is maintained in both groups.

Among the offenders with a previous police record, our data show that 40 per cent have a record of one or two offenses, 37 per cent of three or four offenses, and 23 per cent of five or more offenses. The mean number of offenses previously committed by these offenders is 4,2.

There is no significant difference in this regard between Negro and white offenders, but female offenders have a significantly lower number of previous offenses. The mean for males is 4,5 previous offenses but 2,9 for females.

There is strictly no significant difference between violent and non-violent robbers with respect to the distribution of the number of previous offenses. The sex differential remains as such in both groups. The data we now want to scrutinize are the most important in regard to our hypothesis of a subculture of violence because it indicates what types of offenses the offenders committed in the past. We are hypothesizing that when a violent robber has a prior record he is more likely to have a record of offenses against the person than against property and that, if he has a record of offenses against the person he is more likely than not to have a record of having committed a serious offense such as aggravated assault.

We will use, in this perspective, three kinds of previous arrest patterns. The first one (Method A) makes use of all of the arrest data so that the percentages total over 100 per cent because these were not treated as mutually exclusive categories. Someone who has been arrested twice in the past, for robbery and fraud, is included separately in these two categories. The

second one (Method B) makes use of the majority of the arrest data but treats different categories as mutually exclusive. This typology is based on the configuration of total known arrests for various criminal charges. The arrest history, a longitudinal measure of behavior, allows the investigator to observe the existence of a fixed pattern of criminal behavior, if any such pattern exists. An offender whose official arrest history shows nine robbery charges out of a total of twelve arrests may be taken as a hypothetical case. A type of classification in which criminals are differentiated according to a single (usually most recent) offense has an extreme disadvantage because offenders show some variability in their offenses. Labeling a man a « rapist » on the basis of his most recent crime, even though he has had a long previous history as a robber, is unlikely to lead to any large amount of useful knowledge. If noncriminals manifest a pattern in their legal activities, then the logic of contemporary behavioral theory leads us to assume that the illegal activities of the criminal must also manifest an identifiable pattern. The typology assumes that offenders do not « play the field » of offenses: rather, patterns of offense behavior can be identified. While some kinds of criminals engage in a combination of offenses over time, such as burglary, larceny, etc., it is argued that these cluster together and that offenders can be identified who show similar clustering of offenses. This typology was designed to classify criminals in terms of illegal careers as revealed in cumulative arrest histories. The most frequent charges in the total arrest history of the subjects, was the basis for classification. The label « single pattern » was attached to an arrest history which showed a high frequency of one kind of criminal charge. In order for a history to be classified as a single pattern, it had to satisfy one of the following conditions: a) it had to show three or more arrests, all of which were for the same charge; or. b) an arrest history which contained at least four arrests for a given charge and additional arrests for other charges was divided into three sections and qualified for a single pattern if at least one of the four or more arrests for a given charge appeared in the last section of the arrest history, and if the charge constituted at least 33 per cent of those charges which occurred in the last two sections of the arrest history. « Multiple pattern » refers to an arrest history of two or more single patterns. « Mixed pattern » is associated with an arrest history of three or more arrests in which none of the charges formed a frequency pattern as defined above (Jack-of-all-trades). « No pattern » means that the arrest history has only one or two arrests. This is a residual category of those offenders with insufficient arrests to warrant reliable analysis. The third method (Method C), finally, has been used by Wolfgang in his study of homicide. The category, « offenses against the person », includes those individuals whose previous arrest record comprises at least one offense against the person (including robbery), but does not exclude individuals who have a record of other types of offenses as well as offenses against the person. Although included in « offenses against the person ». the category, « aggravated assault », is also separately considered for purposes of discussion. The percentage with a previous arrest record of aggravated assault is computed from the total number of persons having a previous record. The category, « offenses other than those against the person ». excludes all individuals who have any previous record of an offense against the person. « Offenses against property », means that the individual has a record of property offense only and has no record of any other type of offense. The percentages in parentheses are computed on the basis of the total number in each specific race category.

Methods A and B, in Table 15, clearly indicate that previous crimes of robbery or against property loom large in present robbers' past criminal behavior. Seventy-eight per cent, for example, have committed crimes against property and only 21 per cent crimes of violence (Method A). Only 4 per cent of the offenders have a past profile of assault, but 45 per cent have a single pattern of robbery, larceny or burglary or a double or triple pattern or a combination thereof (Method B). There is no significant difference between Negro and white offenders. If Negroes have higher proportions of crimes of violence, they also have higher proportions of crimes against property. Even if the differences are not significant, we find, contrary to our expectations, that non-violent offenders have a higher proportion of crimes of violence and a lower proportion of crimes against property.

Caution must be exercised here in the interpretation of

TABLE 15 Type of previous arrest record in crimes of robbery by race and sex of offender: 1960 to 1966 (average) Philadelphia sample (in percent)

				X 71		ra	Non-violent robbers		
	•	All robber	8	Violent robbe			Total	Negro	White
Arrest record	Total	Negro	White	Total	Negro	White 			
METHOD A	9,1	8,2	11,4	9,3	8,5 22,1	10,7 16,2	9,0 23,1	8,0 23,4	12,3 21,4 14,8
Sex crimes Crimes of violence Other crimes vs person Robbery Crimes vs property Crimes of cunning, e.g. fraud Narcotics offenses	21,4 15,9 43.6 78.2 3,8 5,0	22,3 16,4 44,1 79,0 2,1 4,8	19,7 14,9 41,7 76,6 9,3 6,1	20.9 16.1 44.1 80.4 4.1 4.8	16.8 44.7 81.5 2.2 5.0	15,1 40,9 76,9 10,1 6,0	15,8 43,3 77,5 3,7 5,1	15.9 43.8 78.1 2.1 4.7	14,6 41,9 76,2 9,1 6,1
Total (over 100 percent) METHOD B No pattern Mixed pattern Single pattern of robbery Single pattern of larceny Single pattern of burglary	40,0 11,4 10,1 11,0 10,8	36,1 10.8 9,2 11.3 8,9	48.1 15.2 14.4 9.4 15.8	38,2 11.1 9.8 12.9 9,1 0.9	34.3 13.4 8.3 13.5 7.7 1,1	44,2 10,4 14,7 10,1 16,1 0,5	40.8 11.5 10.2 10.8 11.1 1,1	37,4 10.1 9,8 11.1 9,4 1,5	49, 16, 14, 8, 13

TABLE 15 (continued)

Type of previous arrest record in crimes of robbery by race and sex of offender: 1960 to 1966 (average)

Philadelphia sample (in percent)

·	V.	All robbe	rs	Vi	olent robbe	rs	Non	-violent ro	bbers
Arrest record	Total	Negro	White	Total	Negro	White	Total	Negro	White
Double pattern of robbery and larceny	4.3	3.8	6.1	4,5	2.9	8.9	4.2	4.1	4,7
Double pattern of larceny and burglary	5,6	6,3	3,9	6,2	6,8	2,9	5,5	5,6	4,1
Double pattern of drunkenness and assault	1,8	2,3	0.9	2,6	2,7	1,1	1,6	2,2	0,6
Triple pattern of drunkenness, assault and larceny	1,4	1,1	2,8	1.1	1,0	2,4	1.5	1,1	3,2
Triple pattern of robbery, larceny and burglary	2,5	2,8	1,7	3.4	3,5	1,9	2,3	2,7	1,3
Total	100,0	100.0	100.0	100,0	100,0	100,0	100,0	100.0	100,0
METHOD C									
Offenses vs person (Aggravated assault) Offenses other than those	35,1 (20,6)	35.8 (22,4)	53.4 (18,6)	3 1 ,1 (21,1)	35.1 (21,8)	31,8 (19,1)	36,3 (20,5)	36,1 (22,5)	37.1 (18,5)
against the person (Offense against property)	64.9 (23,8)	64,2 (24,7)	66,6 (17,8)	65,9 (21,1)	64.9 (25,0)	68,2 (17,9)	63,7 (23,7)	63,9 (24,6)	62,9 (17,8)
Total	100,0	100,0	100.0	100,0	100,0	100,0	100,0	100,0	100,0

the data because not an equal number of potential crimes is compared. According to the Pennsylvania Penal Code, there are 33 sections of offenses against the person but 157 sections of offenses against property for which an individual may be arrested.

Method C, in Table 15, more than the two other methods, indicates that the criminal background of robbers contains, in 35 per cent of the cases, offenses against the person. Still, in 65 per cent of the cases, no offenses against the person are ever found in their background. The same proportions are equally valid for violent and non-violent robbers, for Negroes and whites, with no significant difference between them.

Wolfgang and Amir, in their respective studies on homicide and rape in Philadelphia, found proportions nearly twice as high in the category « crimes of violence ». Robbery would thus appear to follow the pattern of property crimes rather than violent crimes, at least in this regard.

It seems to us, in addition, that this last method of looking at previous arrest records is not very appropriate in robbery cases and tends to underestimate the even more extensive non-violent nature of robbers. In effect, this method includes in the category « against the person » those individuals whose previous arrest record comprises at least one offense against the person, but excludes in the category « other than those against the person » all individuals who have any previous record of an offense against the person. If an individual has six previous arrests, one against the person and five against property, he is included only once and this is with crimes against the person. What happens to bias such a procedure is the fact that the longer the criminal history, the more likely, naturally, that at some stage the offender may also have recourse to violence, although his entire past profile is not violent.

Our data, thus, would seem to refute our prior hypothesis that, from inspection of the frequency distributions, robbers and more particularly violent robbers would have a significantly high proportion with a previous record of crimes of violence. There is no trace among the arrested robbers (Negroes or whites) in our study of a large class of robbers with long previous records of violence. They are not a special class but are primarily thieves who occasionally, though rather rarely, use force to achieve their objects. The display of violence in this context is on the whole an isolated episode.

ADJUDICATION AND DISCRIMINATION

The fact that a crime is recorded as « cleared » does not necessarily mean that someone will be convicted; it merely means that someone has been arrested. As we remember, only 40 per cent of our robbery cases were cleared. And if he is not convicted, this does not always mean that the police have made a mistake; it may mean only that the evidence did not convince a jury beyond reasonable doubt. The police may be quite certain that they have the right man, from their background knowledge of the offender, his associates, his personal record, and so on; but this background knowledge is not normally admissible in evidence, and, legally, there may be sufficient room for doubt to enable him to escape conviction. Even if an offense is admitted, it may still be difficult to prove that the offense was one of robbery; and because of this difficulty a charge of robbery is often not proceeded with if the offender pleads guilty to a lesser offense.

There are, broadly speaking, four possible results to a prosecution for robbery. The defendant may be convicted of the principal offense charged; he may be convicted of some lesser offense of violence such as assault or wounding, usually in conjunction with larceny or housebreaking; he may be convicted of the property offense alone, for larceny for example; or he may be acquitted. Possible pleas may be classified accordingly.

For Philadelphia Negroes as well as whites, about 50 per cent pleaded guilty to the principal offense: the proportion pleading not guilty to any offense was about 36 per cent, with no significant differences across races.

The results with respect to conviction or acquittal for those pleading guilty or not guilty indicate that nearly three-quarters of those brought to trial were convicted either of robbery or of some combination of property offenses and violent offenses akin to robbery. The majority of the convictions are for robbery as such. About one-quarter, thus, are acquitted.

Whereas all those pleading guilty are convicted, more than 40 per cent of those pleading not guilty are acquitted. There are no significant differences across races although Negroes are slightly less often acquitted than whites (41 per cent versus 46 per cent).

Our results show that the percentages of acquittals vary consistently from one year to another around 20 to 25 per cent of all the suspects who are tried.

In a previous chapter on incidence of detection, we mentioned that the chances of impunity were very high because the percentages of cleared cases were low. The further progressive reduction in numbers from offense to conviction is illustrated by the fact that a quarter (24,8 %) of all estimated robbers in our sample were convicted.

We mentioned also in this chapter on incidence that robbery of persons in charge of money or goods as well as robbery on private premises had higher rates of impunity because much lower percentages of cleared cases were associated with these types of robberies. However, when robbers of these categories do get caught and tried, they have much higher rates of convictions.

The proportion convicted is clearly highest for the impersonal types of robbery in which detection is most difficult, and lowest for the easier type of case in which there is some association between offender and victim. This is understandable, since in the more difficult type of case there is little hope of making an arrest at all without a good deal of work by the police in building up a case, whereas in the easier type of case an arrest can nearly always be made. The greater proportion of such convictions in cases brought to trial does not make up, however, for the greater difficulty of detection, and the proportion of actual convictions to total number of offenders is lower in Groups I and III (employment's and private premises' robberies).

Let us now turn to the standards of punishment with respect to convicted offenders. Let us especially examine the penalties in relation to the circumstances of the crime and the criminal record of the offender, in an attempt to discover what factors affect the sentence. The factors considered were race, sex and age and the amount of money stolen (non-legal factors) as well as whether the offender was armed or not, was with an accomplice or not, and used violence or not (legal factors). These legal factors are related to the fact that the criminal code of Pennsylvania recognizes two degrees of robbery. In its simple form, robbery consists of « the taking of personal property by menace or force from the person of another, or in his presence », and is punishable by a fine not exceeding \$5 000 or by a prison term not exceeding 10 years or both. Its aggravated form includes one or more of the following elements: commission with an offensive weapon, an accomplice, or violence; and is punishable by a fine as great as \$10 000 or imprisonment not exceeding 20 years or both.

As a measure of the severity of prison sentences of indeterminate length we shall employ the minimum term, inasmuch as release from prison or parole usually follows shortly upon its expiration. The sentences are classified, following Green's study (1961) on sentencing in Philadelphia, into three broad categories as follows: 1) Penitentiary — prison sentences with minima of no less than one year; 2) Prison — short prison sentences with minima of three to eleven and one-half months; 3) Non-imprisonment — with the exception of a few suspended sentences these consist of probations or their equivalent in the form of bench paroles.

Table 16 summarizes our results. As an overall picture of all convicted offenders, let us mention that 44,9 per cent received a penitentiary sentence (11,7 per cent received 5 years or more, 8,1 per cent from 3 to 5 years, 9,0 percent from 2 to 3 years and 16,1 per cent from 1 to 2 years); 31,0 per cent received a prison sentence (3 to 11 months); and 24,1 per cent received a non-imprisonment sentence (11,3 per cent had a short-term jail sentence of less than 3 months, 10,3 per cent had probation, 2,5 per cent has a suspended sentence, and only one individual was fined).

Male offenders, as seen in Table 16, suffered much heavier penalties with 45,4 per cent of male cases receiving penitentiary

TABLE 16

The severity of sentences in crimes of robbery according to selected non-legal and legal variables: 1960 to 1966 (average)

Philadelphia sample

	Sentence *					
Variables	peniten- tiary sentence %	prison sentence	non- impri- sonment %	to nº	tal %	mean minimum term of prison sentences (in months)
Sex of offender Male Female	45,4 9,7	31,9 30,6	22.7 59,7	(584) (31)	100,0 100,0	40,8 14,1
Age of offender Under 21 21-29 Above 30	35.1 32,3 30,4	27,2 44,4 47,1	37,7 23,3 22,5	(195) (307) (113)	100,0 100,0 100,0	26,3 33,4 32,8
Race of offender Negro White	48,9 58,4	25.2 27.4	25,9 14,2	(527) (88)	100,0 100,0	30,3 31,4
Race of offender and victim Negro vs white White vs white Negro vs Negro White vs Negro *	61,4 58,4 29,3	28,1 27,4 21,1	10,5 14,2 49,6	(154) (92) (369)	100,0 100,0 100,0	32,5 31,4 29,2
Amount of money stolen Under \$50 \$51-\$250 Over \$250	36,4 39,1 41,9	22.4 28.5 28.4	41,2 32,4 30,7	(363) (169) (83)	100,0 100,0 100,0	25,6 33,1 33,0
Type of robbery Armed Unarmed Accomplice(s) No accomplice Violent Non-violent	61,9 38,2 37,8 35,2 46,7 42,4	27,3 34,9 31,8 32,4 30,8 28,7	10,8 26,9 30,4 32,4 22,5 28,9	(310) (305) (214) (401) (184) (431)	100,0 100,0 100,0 100,0 100,0 100,0	37,2 19,6 28,7 27,5 30,4 26,9
Bills of indictment 2 or more 1	61,8 22,4	20.8 57.1	17,4 20,5	(399) (216)	100,0 100,0	34.8 13.1
Prior convictions Robbery or felony against person Other felonies or	71,8	27,7	0,5	(121)	100,0	45,1
misdemeanors against persons Other misdemeano or no conviction		33,6 38,1	16,5 32,1	(203) (291)	100,0 100,0	18.4 21,8

Prison sentences are tabulated according to the minimum term.
 ** There was not a single case of a white offender with a Negro victim being convicted.

sentences whereas only 9,7 per cent of female cases were thus adjudged. Reversely, 59,7 per cent of the females had non-imprisonment sentences whereas only 22,7 of the males were thus adjudged. Obviously, the mean minimum term of prison sentences (in months) was nearly three times higher for males than females (40,8; 14,1).

Dividing the offenders into three age-groups (below 21, 21-29, and above 30), we did not find any significant difference with respect to penitentiary sentences (the three groups had about one-third of their cases in this category). However, the offenders below 21 received prison sentences much less often (27,2 per cent versus 44,4 and 47,1) but many more non-imprisonment sentences (37,7 per cent versus 23,3 and 22,5). The mean minimum term of prison sentences was lower for offenders below 21 (26,3 months) than for the two other groups (33,4 and 32,8).

Skipping over the data on race for the moment (and to which we shall turn to at the end of this analysis because of their importance), we also notice in Table 16 that, although the differences of severity of sentences are not significant with respect to amounts of money stolen, still the proportions of penitentiary sentences are higher for robberies involving sums of money over \$250 (41.9 per cent) and even \$50 to \$250 (39.1 per cent) than below \$50 (36.4 per cent). Moreover, whereas the two highest money categories show higher percentages of prison sentences (28.5 and 28.4 versus 22.4 per cent), the category under \$50 has a much higher proportion of non-imprisonment (41.2 versus 32.4 and 30.7 per cent). The mean minimum term of prison sentences is lower for offenders who robbed less than \$50 (25.6 months) than for the two other groups (33.1 and 33.0).

Armed robberies, clearly, are punished more severely than unarmed ones. In effect, 61,9 per cent of the armed robbers received penitentiary sentences but only 38,2 per cent of the unarmed robbers. The latter received, contrariwise, more prison sentences (34,9 versus 27,3 per cent) and more non-imprisonment sentences (26,9 versus 10,8 per cent). Armed robbers' mean minimum term of prison sentences was nearly twice that of the unarmed robbers' (37,2 versus 19,6 months).

Commissions of robbery with or without accomplice (s) make little difference with respect to sentencing, save for a

slightly higher proportion of penitentiary sentences for robberies with accomplice (s) (37.8 versus 35.2 per cent) and slightly higher proportions of prison and non-imprisonment sentences for robberies without accomplice (32.4 versus 31.8 per cent and 32.4 versus 30.4 per cent). The mean minimum term of prison sentences is also slightly higher for robberies with (28.7 months) than without (27.5 months) accomplice (s).

The violent robbers (those offenders injuring their victims to the point of treatment and discharged or hospitalization) received more penitentiary and prison sentences than non-violent robbers (46.7 versus 42.4 per cent and 30.8 versus 28.7 per cent). They received, contrariwise, less non-imprisonment sentences (22.5 versus 28.9 per cent). The mean minimum term of prison sentences was 30.4 months for violent robbers and 26.9 months for non-violent robbers. These differences in terms of percentages or months are not significant, however.

Great and significant is the difference between robbers found guilty on two bills of indictment or more in comparison with those who have only one. The first group received three times as many penitentiary sentences than the other (61,8 versus 22,4 per cent), much less prison sentences (20,8 versus 57,1 per cent), slightly less non-imprisonment sentences (17,4 versus 20,5 per cent). The mean minimum term of prison sentences is also nearly three times higher for robbers with two bills of indictment or more (34,8 versus 13,1 months).

Prior conviction is also a very significant variable and exerts a profound influence on the penalty awarded. The judges differentiate among the following three types of offenders listed in descending order of the severity of the penalties imposed: 1) those who have been convicted of robbery or a felonious crime of violence; 2) those who have been convicted of lesser felonies (burglary, theft, etc.) or crimes against the person of misdemeanor grade, and 3) those with no prior felony convictions or with convictions of minor misdemeanors.

By far the heaviest sanctions fall upon the defendants in the first category — 71,8 per cent received penitentiary sentences, 27,7 per cent received prison sentences and only 0,5 per cent received non-imprisonment sentences. The mean length of their prison sentences is 45,1 months. The defendants in the second category compared with those in the third received decidedly more penitentiary sentences (49,9 versus 29,8 per

cent), less prison sentences (33,6 versus 38,1 per cent) and much less non-emprisonment sentences (16,5 versus 32,1 per cent). However, the average length of the prison sentences for the defendants with prior records of intermediate gravity is three months less than for those with the least serious prior records (18,4 versus 21,8 months). This is due to the fact that a larger percentage of the cases in the latter category involved the use of a deadly weapon (58,4 versus 41,2 per cent).

It is obvious that many of these non-legal and legal variables can be cross-tabulated to refine our findings. For example, if the percentages of robbery cases receiving penitentiary sentences were stratified according to the number of prior felony convictions and the number of bills of indictment, we could see that the most influential element is the number of prior felony convictions because, among offenders with one or two bills of indictment, 48,7 per cent of those having one prior felony conviction received penitentiary sentences whereas only 22,3 per cent so received when they had no prior felony conviction. Similarly, among offenders with three bills of indictment, 81,9 per cent of those having one prior felony conviction received penitentiary sentences whereas only 49,8 per cent so received when they had no prior felony conviction.

Up to this point, then, we found that the statistically significant differences in terms of higher penitentiary sentences and higher minimum terms of prison sentences (in months) are associated with offenders who are male, armed, guilty on two bills of indictment or more, and who possess a prior conviction record for robbery or felony against the person, although other variables indicate similar tendencies (although not significantly), i.e. offenders aged above 21, robbing above \$50, with accomplice (s) and violently. The most single significant variable, in fact, seems to be the prior conviction record.

But let us come to our data on racial differences in sentencing which is a particularly sensitive area of research and on which we have more to say. We are in fact replicating at this stage a prior research made in Philadelphia by Green (1964) with respect to inter and intra-racial crime relative to sentencing. Green in this particular article, investigated robbery and burglary cases. We are obviously in a position to assess the reliability of Green's results only in regard to robbery.

The problem is well-known. It is related to the claim that criminal courts in the United States practice racial discrimination in sentencing. The research evidence on which the charge is grounded shows a general tendency on the part of the court to impose heavier penalties on Negroes in comparison with whites. The study of Green on all felonies challenged such a conclusion pointing out that the previous researches failed to take into adequate account legally significant differences between whites and Negroes in patterns of criminal behavior. A paradox to the mentioned claim, however, is the contention that Negro offenders seem to receive preferential treatment when the victims are also Negro because the community norms tolerate a less rigorous enforcement of the law in these circumstances. The same norms are said, contrariwise, to demand strict enforcement when the victim is a white, especially when the offender is Negro. Studies on homicide, for example, have shown that the four offender-victim categories in relationship with the severity of punishment rank as follows: Negro versus white, white versus white, Negro versus Negro, and white versus Negro. The validity of these studies, however, may have been vitiated due to the absence of controls for the legal aspects of sentencing.

Our own data in Table 16 indicate that there are no significant differences between Negro and white offenders, although whites received more penitentiary sentences (58,4 versus 48,9 per cent), whereas Negroes received more non-emprisonment sentences (25,9 versus 14,2 per cent). However, the mean minimum term of prison sentences is very similar, with 30,3 months for Negroes and 31,4 months for whites.

When inter- and intra-racial differences are considered, we see, also in Table 16, that the court seems to adopt an indulgent attitude toward the Negro who robs Negro. In such cases, the offenders received the mildest penalties with only half as many penitentiary sentences (29,3 versus 61,4 and 58,4 per cent) and four times as many non-emprisonment sentences (49,6 versus 10,5 and 14,2 per cent) as either the N-W or the W-W, both of whom received virtually the same percentages of the various forms of penalties. The mean lengths of time of the minimum term of prison sentences, however, are not significantly different, being 32,5, 31,4 and 29,2 months, for N-W, W-W and N-N cases, respectively.

The results are roughly similar to Green's, although Green's N-N mean prison sentence exceeded that of the W-W by 3,2 months whereas in our case it fell short of it by 2,2 months.

Before venturing any firm conclusion concerning the influence of the racial equation on sentencing, it is obviously necessary to consider the possible association between the racial composition of the cases on the one hand, and the significant variables constituting the legal criteria of the gravity of robbery on the other. Table 17 shows that the rank order of the

TABLE 17

Selected legal criteria of gravity in crimes of robbery according to the offender and the victim: 1960 to 1966 (average)

Philadelphia sample

Criteria	N-W	of offender a W-W	N-N
	%	%	%
Type of robbery			
Armed	62.1	56.2	12.7
Unarmed	37.9	43.8	87.3
Total	100.0	100 0	100,0
	(154)	(92)	(369)
Bills of indictment			
2 or more	73,2	75,8	35,1
1	26.8	24.2	74,9
Total	100.0	100 0	100.0
•	(154)	(92)	(369)
Prior convictions	(131)	(32)	(305)
Robbery or felony against			
	34.5	20.9	101
person	.54,5	20,9	1 8.1
Other felonies or misdemeanors			
against person	18.1	39,8	32,5
Other misdemeanors or			
no conviction	47,4	39.3	49,4
Total	100 0	100.0	100.0
	(154)	(92)	(369)

three offender-victim categories with respect to the gravity of the cases is the same as the rank order with regard to the severity of the sentences: the N-W have on the whole slightly more serious cases than the W-W, and the N-N have by far the least serious cases. Armed robberies constitute 62,1 per cent of the N-W cases, 56,2 per cent of the W-W cases, but only 12,7 per cent of the N-N cases.

The defendants in W-W cases were found by the court to be the most active in crime, having been convicted on two bills of indictment or more in a slightly greater percentage of instances than the N-W (75,8 versus 73,2 per cent). The N-N,

by contrast, incurred conviction on two or more bills only half as frequently (35,1 per cent) as either of the other two categories. The slight edge in gravity of the W-W cases over the N-W cases with regard to the number of bills of indictment is substantially offset by the generally more serious prior record of the N-W offenders: 20,9 per cent of the former and 34,5 per cent of the latter involve a prior conviction of robbery or a felonious crime against the person. Again, the N-N present the least grounds for an aggravation of sentence — only 18,1 per cent have prior records containing a conviction of either of these two more serious types of offenses.

Since the criminal act in robbery differs in its judicial characteristics according to the race of the offender and the victim, the analysis of the effect of the racial factor on sentencing must incorporate suitable controls. Table 18 compares the weight of the penalties awarded the defendants in the three separate categories — N-W, W-W, and N-N — with the variables for the legal criteria held constant. The measure of the severity of the penalties is the mean average number of months of the minimum term of imprisonment. In computing the mean, dispositions which do not involve imprisonment (probation or bench parole) are assigned a value of zero.

The data in Table 18 reveal no consistent tendency to be unduly severe or lenient toward any particular offender-victim grouping. The relatively mild treatment accorded a particular group in certain subcategories of the legal variables is offset by the relatively severe punishment inflicted in other subcategories. We note, for example, that the few cases of N-N armed robbery convicted on 2 bills of indictment or more receive decidedly milder sentences than cases of comparable gravity in either of the other offender-victim groups; but in cases of unarmed robbery, particularly those with prior convictions of robbery or felonious crime against the person, the N-N receive the heaviest sentence.

In an attempt to determine more precisely if, in the overall picture, any particular group of defendants incurs relatively undue strictness or mildness of punishment, for each offender-victim group the mean length of the sentence is compared with the theoretically expected mean — the value that would occur if all cases of equivalent gravity, irrespective of race, received the same sentence. The derivation of the theoretically expected

TABLE 18

Mean number of months of sentences* for conviction of robbery by race of offender and victim with selected legal variables held constant: 1960 to 1966 (average)

Philadelphia sample

				Race of offend	er and victim	
Type of robbery	Indictment	Prior convictions	N-W %	W-W %	N-N %	Total %
Armed	2 or more	robbery or felony against person	67.8	61,5	55,6	60,8
		other	29,8	30,1	7,2	24,4
	1	robbery or felony against person	29,7	27,3	14,2	22,5
		other	14,1	11,6	8,2	10,9
Unarmed	2 or more	robbery or felony against person	19,1	20,4	58,5	47,7
		other	8,5	7,9	13,2	10,4
	1	robbery or felony against person	13,1	11,9	7,8	10,6
		other	15.8	16,1	7,1	11,8
		means of total	28,8	24,1	16,2	20,9
			(15 4)	(92)	(369)	(615)
		theoretical means **	28,5	23,7	16,8	20,9

^{*} Dispositions other than imprisonment — probation, bench parole, suspended sentence — are assigned the value of zero.

** Obtained by scoring each case according to the mean sentence of the subcategory of legal variables in which it occurs (see total column) and computing the weighted mean of the scores.

mean is as follows. Each case is assigned a score which is simply the mean average number of months of the minimum term of imprisonment of all the cases in the particular subcategory of the cross-classification of legal variables in which it occurs. The expected mean sentence, then, is the weighted mean of the scores assigned the cases of a particular offendervictim group. The amount and direction, plus or minus, of the discrepancy between the observed and the expected means provides a practical measure of the court's retributiveness or indulgence toward any one of the offender-victim groups relative to the others. The results recorded across the bottom of Table 18 show that for N-W and W-W cases the amount by which the observed mean exceeds the expected mean is virtually identical, 0,3 and 0,4 months, respectively. Apparently the advantage of a higher percentage of non-prison sentences enjoyed by the W-W over the N-W is counter-balanced by the disadvantage of somewhat longer prison sentences. The observed mean of the N-N cases falls short of the expected mean by 0,6 months. In other words, the N-W are sentenced a little more severely relative to the N-N, but the difference is of no significance.

Our conclusion is essentially similar to Green (1964, p. 356) who, on the basis of a similar controlled « experiment » for robbery as well as burglary, was to write:

The evidence does not support the hypothesis that the court differentiates the seriousness of crimes according to the race of the offender relative to the race of the victim - certainly not, as between Negro interracial and white intraracial offenders. The slightly less severe sentences accorded Negro intraracial offenders is not in the writer's estimation of any consequence. The limited number of legal criteria that could be reliably converted from the official records patently show that the N-W and W-W robbery cases exhibit a much higher degree of malicious intent than the N-N cases. Undoubtedly other factors not as easily detected or measured impinge upon the judge's decision. Those which are discernible also suggest the lesser gravity of N-N criminality. We have already noted, for example, that in cases of unarmed robbery N-N cases less often than the others indicate the use of violence or threats of violence. The criminal deed in the lesser variety of unarmed robbery consists typically of purse snatching or looting the pockets of a victim lying in a drunken stupor. Also, data on age-differences among the three groups independently suggest that the N-W, W-W, and N-N VIOLENCE AND ROBBERY

cases, in that order, represent diminishing degrees of maturation in robbery. Close to one-half of the Negro intraracial robbers compared with one-fourth of the white intraracial robbers and one-sixth of the Negro interracial robbers are under 21 years of age.

The conclusiveness of Green's results and ours is obviously limited by the size of the sample and the hazard inherent in generalizing the situation in Philadelphia to other locales. One might indeed attribute the relative racial equality of sentences in robbery to the fact that Philadelphia is not a southern community and thus lacks a « caste » tradition in race relations. It would be unrealistic, however, to assume that racial prejudice is negligible in northern communities. While its manifestations may not be as institutionalized as in the south, it is nevertheless a widely expressed attitude and a potent force in the drift of community affairs.

However, the view that the prevailing racial biases of the community automatically infect the decisions of criminal court judges fails to consider that persons differ in their susceptibility to prejudice depending upon the character of their involvement in the community structure.

Unfairness to minority groups before the law, to the extent that it exists, is more apt to occur in the less public phases of the administration of justice than in the courtroom, or indirectly as a function of the minority group defendent's socioeconomic disadvantage in exploiting all avenues of recourse offered by the law to the accused before and after conviction.

SUMMARY

Robbery is a form of theft where the offender uses force or violence to obtain property from a victim or threatens the victim by use of threats, weapons, or other means, to obtain the property.

In the mind of the public, robbery is frequently associated with the flamboyant headline-grabbing « stagecoach », « train », or « bank » robberies of the past and present as well as with the legendary appealing exploits of heroic robbers like Robin Hood and Jesse James. But « great » robberies are relatively rare. Bank robberies nowadays, for example, represent less than one per cent of the annual figure of 150 000 robberies committed in the United States, and most of them are not sensational at all.

The present research has attempted, rather, to assess some of the gross correlates of the run-of-the-mill type of robbery that is a large portion of the daily routine of police departments. It presents an analysis of the trends and patterns in crimes of robbery from among 1 722 sample cases that occurred in Philadelphia, Pennsylvania, between January 1, 1960 and December 31, 1966. The sample number of victims was 1 785, the sample number of estimated offenders was 2 482, and the sample number of arrested offenders was 892. The primary source of data was the offense reports of the Philadelphia Police Department. This study follows the path opened by Wolfgang and Amir in their studies of homicide and rape in Philadelphia and thus contributes to enlarge our knowledge of crimes of violence in this city. It is assumed that the results in Philadelphia have implications that hold true for every large urban commu-

VIOLENCE AND ROBBERY

nity. The research on robbery in London by McClintock and Gibson is obviously an excellent cross-cultural background reference for our study.

Answers were sought with respect to the following variables: overall trends in robbery rates according to the seriousness of the offenses and according to different circumstances in which crimes of robbery occur; race, sex and age differences of the victims as well as of the offenders; means of attack; temporal, spatial and ecological patterns; the relationship between the presence of alcohol and robbery; previous record and adjudication. The victims and offenders were considered as mutually interacting participants whenever appropriate.

The present study is phenomenological and typological. Methodologically, it is essentially an exercise in data reduction and description rather than in theory construction and testing. It calls simply for the uncovering and unraveling of recurring patterns and uniformities in which particular groups of people are found to commit a particular type of crime, i.e., robbery, or even particular forms of robbery, in particular types of circumstances. It is thus assumed that the act of robbery is a structured event, and that, using a sociological viewpoint, it can be seen as learned behavior committed within socio-culturally defined sets of situations.

The suggested associations of variables were tested primarily by the chi square test of significance.

The following is a summary of the major significant findings which emerged from the study.

Robbery in the United States

A preliminary survey of the UCR data shows a very positive and significant matrix of inter-correlations between the seven major index crimes from 1958 to 1966. The total UCR annual crime rate is thus meaningful because the items included in it do not tend to mask each other in terms of variations over time. A similar study in England by Wilkins found, contrariwise, that a total crime rate would not be valid because variations of major crimes in Britain are mostly independent over time.

An analysis of the UCR data on robbery per se, over time and space, indicates that robbery has fluctuated from a high in 1933 and a low during World War II to a point where it is

now, about 20 per cent above the beginning of the postwar era. Rates of robbery increased by only 7,5 per cent from 1948 to 1959, but by 94,3 per cent from 1959 to 1966. The total annual rate in 1966 was 78,3 robberies per 100 000 inhabitants. This sudden accelerated increase is pervasive. But the greater the size of a city, the greater the rates and the greater the increase.

The City of Philadelphia, however, which ranks 4th in terms of population, ranked only 24th in terms of robbery rate in 1965 among the 56 cities above 250 000 inhabitants. This is due in part to the fact that the recent increase has been moderate in Philadelphia, where there was an increase of only 16 per cent from 1959 to 1966, six times less than the national increase. Chicago, New York, Washington (D. C.), Detroit and Los Angeles have the highest rates, whereas Jersey City, Wichita, San Jose, Honolulu and Milwaukee have the lowest ones.

The decline of the East South Central States as a region of very high robbery occurrences since 1940 (when it had the highest rate), has been counter-parallelled by a consistent concentration of robbery manifestations in the Pacific and East North Central States, which now have had the highest rates for more than two decades. New England States had and still have the lowest rates of robbery. In recent years, California, New York, Michigan, Illinois and Missouri have had the highest rates, whereas Vermont, Maine, North Dakota, Idaho and South Dakota have had the lowest ones. Pennsylvania, which ranks third in terms of population, ranks consistently around 35th in terms of robbery rate among the fifty states.

Overall trends in Philadelphia

The legal label masks the variegated dimensions of robbery: the amount of property stolen, the kind of intimidation, and the presence or absence, as well as type, of physical injury to the victim. The new Sellin-Wolfgang crime and delinquency Index is the best way now available to take into account and reflect qualitative and quantitative changes in criminality, because it gives a weighted score to each component of a criminal event, and these scores represent the subjective gravity attached to each component and to the whole event by the community itself. Applied to our data, the S-W index shows two decreases in the Philadelphia rate of robbery per 10 000 inhabitants be-

tween 1960 and 1962, but a continuous increase thereafter up to 1966. The UCR index, applied to the same data, shows contrariwise, two increases between 1960 and 1962, a decrease from 1962 to 1963, two increases between 1963 and 1965, and a decrease between 1965 and 1966. An internal analysis of the S-W rate of robbery indicates that the injury component, which is heavily weighted by the community, is more important in the years of increase, particularly when the S-W index shows an increase, whereas the UCR index shows a decrease. The usefulness of the S-W index as a supplement to the UCR index is thus clearly buttressed by these findings because it permits a more accurate assessment of trends and profiles in criminality.

The mean seriousness scores by robbery event, as determined by the S-W index, surprisingly indicates that juvenile robberies are as serious as robberies in general. The hypothesis that juvenile robberies are « nasty but not very serious » deviant acts is thus rejected.

Forty-four per cent of the robberies in Philadelphia produce no injury at all, whereas 56 per cent do produce some injury: 26 per cent, minor; 25 per cent, treated and discharged; and 5 per cent, hospitalization. Studies on other crimes of violence indicate much higher proportions of injured victims. Fifteen per cent are attempted robberies and involve no money taken; 48 per cent involve sums of money under \$50; 26 per cent between \$50 and \$250; 8 per cent between \$250 and \$2 000; 2 per cent between \$2 000 and \$9 000; and less than 1 per cent over \$9 000.

Circumstances of occurrence

Robbery in the open following sudden attacks on ordinary passers-by accounts for more than 52 per cent of the crimes of robbery in Philadelphia. Robbery of persons who, as part of their employment, were in charge of money or goods, for 26 per cent. Robbery of householders on private premises, for 7 per cent. Robbery after preliminary association of short duration between victim and offender, for 10 per cent. And robbery in cases of previous association of some duration between victim and offender, for 5 per cent. In London, the proportions are reversed for the two major categories, since more than 50

per cent are employment's robberies and about a quarter are robberies in the open.

Among robberies in the open following sudden attacks, half of them are committed against male victims, 40 per cent against female victims (mainly purse snatchings) and 10 per cent against child victims under 14 years of age.

More than 85 per cent of all robberies are committed against complete strangers. The reverse is most common, contrariwise, in studies on other crimes of violence.

The average seriousness scores by event in robberies on private premises and robberies in the open following sudden attacks are significantly higher than for the other robbery categories.

Incidence of detection

The chances of impunity enjoyed by robbers are relatively high because 60 per cent of the robberies in Philadelphia are not cleared. Clearance rates vary, however, with categories of robbery. As many as 7 to 8 out of every 10 robbers get away in robberies of persons who, as part of their employment are in charge of money or goods. A six-to-four chance of impunity is applicable to robberies in the open, and it is fifty-fifty in robberies on private premises. It is only in the last two categories, when the offense is committed following previous association of some sort between the victim and offender, that the chances of impunity fall to a level which gives some reality to the enforcement of the criminal law: only 1 or 2 of these offenders escape being caught. Over time, the proportion of uncleared robberies of persons in charge of money or goods has increased continuously from 70 per cent in 1960 to over 80 per cent in 1966. Planned robberies are thus getting more secure.

In a considerable proportion of the crimes that are cleared the offenders are caught in flagrante delicto by the police, or are detained by the victim himself, by his associates or by passers-by. There has been a fall over the years in the proportion of cases in which the offender was caught by a member of the public. This change may reflect the increasing reluctance of passers-by to become involved.

The sooner the police is notified, the higher are the

chances of the offense being cleared. Also, the higher the value of property stolen, the lower the detection rate.

Race, sex and age

As expected, we find that there is a significant association between robbery and the race and sex of both victim and offender. Negroes and males involved in robbery far exceed their proportions in the general population. Negroes have more than twice their share of victims and three times more offenders than their quota in the general population (about 30 per cent of the Philadelphia population). Males represent about three-quarters of the victims and 95 per cent of the offenders, whereas, they represent only 48 per cent of the Philadelphia population.

Even so, whites are more often victimized in crimes of robbery than in other crimes of violence. This reflects the specific nature of robbery, which involves primarily theft of money and for which whites are more of a potential target because they usually have or are expected to have more money.

In terms of mean seriousness per event among victimized groups, white males are the most seriously affected, followed by white males, Negro females and white females. White victims, in general, are subject to more serious robbery events than are Negro victims, as are all male victims in comparison with all female victims. Negro offenders in general are associated with the most serious events in comparison with white offenders, as are all male offenders in comparison with female offenders.

Specific rates per 10 000 inhabitants by race and sex of victims and offenders based on the «potential» population of each race and sex show that the association between race and robbery is more significant than that between sex and robbery with respect to victims, but the contrary with respect to offenders. For example, among victims, the Negro rate is about six times greater than the white rate, but the male rate is not even four times greater than the female rate; however, among offenders, the Negro rate is about sixteen times greater than the white rate, but the male rate is nearly twenty times greater than the female rate.

The question remains whether most offenders select victims from their own or another race. What expectations might one

have about becoming a victim of an offender of a given race and sex? When specific annual rates of victimization for robbery in Philadelphia are examined in this perspective, the following propositions hold true:

- 1) Females are more likely to be victims of males than males are of females, irrespective of the race of victims and of offenders;
- 2) Males are more likely to be victims of other males than of females from either race:
- 3) Females are more likely to be victims of the opposite sex than of the same sex, regardless of race;
- 4) A person of a given race and sex is more likely to be a victim of his own race and sex than of an offender from the opposite race, regardless of sex;
- 5) A white person is more likely than a Negro person of the same sex to be a victim of a person of the other race and sex;
- 6) A Negro is more likely to be a victim of another Negro than is a white of another white, regardless of sex;
- 7) The highest risk of victimization for persons in each racesex subgroup occurs when a Negro male is the offender;
- 8) When race lines are crossed, then the men and women of either race run little risk of victimization from women of the opposite race.

These propositions have also been found correct in other crimes of violence. Proposition 6, however, is much more to the point with respect to robbery than to other crimes of violence. In effect, 24 per cent of the crimes of robbery happen across race lines, 23 per cent by Negroes against whites and 1 per cent by whites against Negroes; 76 per cent are intraracial, 63 per cent among Negroes and 13 per cent among whites. (The intraracial percentage in other crimes of violence is only about 6 per cent.) In 76 per cent of the cases, also, the victim and offender were of the same sex (73 per cent among men and 3 per cent among women). The ratio of intra- to interracial robbery, as well as the intra- and intersex robbery, is the same, i.e., 3,1 to 1.

In terms of mean seriousness per event, the Negro-white events are the most serious ones, followed by the Negro-Negro, white-white and white-Negro. The more serious harm is likely to result, first when the offender is a male of either race and the victim is a male of either race, second when the offender

is a male of either race and the victim is a female of either race, third when the offender is a female of either race and the victim is a male of either race, and fourth, when the offender is a female of either race and the victim is a female of either race.

Forty-three (43) per cent of all robberies involve one male against another male, 23 per cent two or more males against one male, 18 per cent one male against one female, 8 per cent two or more males against one female, 5 per cent one female against one female or one male, and 3 per cent two or more offenders against two or more victims. More serious harm occurs when offenders outnumber victims.

In terms of age-specific rates among offenders the age groups 15-19 and 20-24 predominate, while the highest rates for victims are in the age groups 20-24 and 25-29. Negro offenders and victims are younger than whites. Under age 15, the statistical chance of being an offender or a victim in robbery is very low, while over age 50 the chance of being a victim is much greater than that of being an offender. In fact, there is a gradient decrease of the rates as offenders get older, but victims' rates between 40 and 50 years of age are higher than between 30 and 40 years of age. The median age for offenders is 26.8 compared to 36,1 years for victims. The probability is strong here that mature people are often recognized to possess more money and thus become better potential victims, especially when in addition they are whites. The importance of the race factor is striking in view of the fact that the lowest 5-year agespecific rates for Negro males and females are close to or similar to the highest of such rates for white males and females, respectively.

When age disparity is related to mean seriousness per event, no significant difference is found when the offender is older, younger or of the same age. The data seem to suggest that the assumption seemingly made by offenders about the higher potential vulnerability of older victims is not warranted. However, it is warranted because older victims do suffer more pecuniary losses although they suffer less injury than younger ones.

Data on social characteristics show that the victims are much higher in the occupational scale than the offenders who are at the bottom of the scale, as criminals are in general. This is not surprising because offenders obviously look for people

with money and are likely to attack well-off citizens whenever possible. Even when social class is theoretically controlled, the Negro rate of robbery is appreciably higher than the white rate. The available data also show that robbers, like other criminals, are poorly trained, with a background of family disorganization, poorly educated, poorly employed, poorly remunerated, etc.

Means of attack

Armed robberies and strong-armed robberies each claim one-half of all the cases of robberies. Firearms (32 per cent) and physical tactics (38 per cent) are the principal modes of intimidation. Male victims are more often intimidated by firearms, whereas female victims are more often intimidated by physical tactics. Male offenders, however, use most often physical tactics, whereas female offenders use firearms. These data make sense because female offenders can hardly use effectively physical coercion and thus have recourse more often to firearms as a means of intimidation, while males can use to their own profit their natural physical strength, especially with respect to women. White males, however, use firearms much more often than Negroes. The modes of final execution give us another picture of the situation. In effect, if attacks by weapons of all kinds constitute 50 per cent of the intimidation cases, they are de facto used in only less than 10 per cent of the time. Firearms, in particular, which are often used to intimidate (32 per cent of the modes of intimidation) are practically never really used (1 per cent of the modes of execution). The majority of the victims are thus harmed physically. Women are significantly less often injured than men, whereas whites suffer no harm much more often than Negroes. Data show that male and Negro victims put up significantly more resistance to their assaillants and thus force the latter to « talk back » in one way or another.

Data also indicate that the younger the age of the offender the more often will be use physical tactics, whereas the older he is the more often will he be armed. Physical power of youth is obviously a variable which explains in part this association.

The hypothesis that the mean seriousness scores would be higher in armed robberies than in unarmed ones is not confirmed by our study.

Temporal patterns

Data on seasonal, monthly, daily and hourly variations do not constitute anymore a scientific problem of important import because they have been unraveled to a considerable extent and seem consistently to replicate themselves in time and space, save for minor adjustments and variations. Robbery occurs mainly during the winter months, particularly in December, Fridays and Saturdays, and at night. Crimes against property in general usually follow such a pattern; other crimes of violence also, save for their higher concentrations in warmer months.

Spatial patterns

Police statistics often differentiate between highway, purse snatching, residence, business and miscellaneous robberies, which constitute in our data 47 per cent, 7 per cent, 8 per cent, 23 per cent, and 15 per cent of all robberies. It is obvious, however, that the exposed risk or target victimization group is not logically the same for all these categories and that robbery occurrence rates must be based on environmental opportunities specific to each category. The number of business and commercial establishments is the base for business robberies. The number of households is the base for residence robberies. The number of females over 14 years of age is the base for purse snatching robberies. The total resident population, 14 years and over, is the base for highway and miscellaneous robberies. Such robbery rates per 10 000 specific opportunity by place of occurrence, were thus computed for Philadelphia. It shows that highway robberies have a rate more than twice the one of business robberies when both rates are based on the total population, but that business robberies have a rate 16 times greater than highway robberies when specific environmental opportunities are used. The annual likelihood of being robbed in public ways in Philadelphia is one in every 1118 persons aged 14 years and over. The likelihood of a household's being robbed is one in every 4 244 households. Finally, one in every 3 676 women aged 14 years and over is a victim of a violent purse snatching during a year in Philadelphia. Better comparisons among cities are thus possible. Similar specific rates for Chicago, for example, indicate that specific

business robberies there have a rate nearly twice the one in Philadelphia.

The social environment also enters into the relationship between the victim and the offender, by race and sex. Little attention has been paid to the kinds of situations where particular kinds of persons are likely to be victimized by given kinds of offenders. Although the most dangerous single place is the street or public setting, men rob other men significantly more often in the street, whereas they rob women significantly more often in places of business and residences. More of the strongarmed robbery offenses occur in public than on business premises and the contrary is true with respect to armed robbery, which is highly associated with business robberies. White males are more likely than Negro males to victimize persons of any race and sex in a business than a street setting. Whites are also more often victimized than Negroes in business robberies. It reflects the fact that whites own the majority of businesses, even in Negro areas, and are thus potentially more apt to be victimized as such.

All in all, robberies are most likely to occur in street settings than is the case with other crimes of violence which often happen inside a dwelling.

Ecological patterns

Places of robbery offenses, residences of offenders and residences of victims are concentrated in the central Philadelphia police districts and/or census tracts. Negroes, of course, are highly represented in central city. This central area happens also to be an area of acquisitive crime attractiveness because commercial establishments are numerous.

Robbers, however, do travel and victims are often victimized outside their neighborhood. A « crime neighborhood triangle » (place of offense, place of residence of offender and place of residence of victim in the same census tract) occurs in only 14 per cent of the cases; an « offender mobility triangle » (offense and offender in the same tract but not victim) in 19 per cent; and « offense mobility triangle » (offender and victim in the same tract but not offense) in 12 per cent; and a « total mobility triangle » (offense, offender and victim all in different tracts) in 38 per cent. Offender and victim are thus living in the same census tract in 26 per cent of the cases;

place of offense and residence of the offender are in the same tract in 33 per cent of the cases; and place of offense and residence of victim are in the same tract in 32 per cent of the cases.

The median distance, as calculated by a map measure, between offender's residence and, place of offense is 1,07 miles; between place of offense and offender's residence, 1,61 miles; and between place of offense and victim's residence, 1,88 miles. These distances are relatively greater than similar calculations for other crimes of violence; robbers seem to travel farther in order to find a victim unknown to them. Our data also indicate that the proportions of offenses, in these different relationships between offense, offender and victim, distinctively and progressively waned with distance. The geometry and the sociology of distances in migration, message diffusion and marital choice of partner seem to follow similar patterns.

Alcohol

Alcohol is present in less than 15 per cent of the cases, either in the victim alone (8 per cent), the offender alone (4 per cent) or in both the victim and offender (3 per cent). There are no significant race and sex differences, although Negroes and males have higher proportions of alcohol cases. The presence of alcohol is not related to higher mean seriousness scores per event. The presence of alcohol in other crimes of violence is much more prevalent. That alcohol does not significantly trigger robbery may be related to the more planned nature of this crime.

Victim-precipitated robbery

Von Hentig and Wolfgang gave the initial impetus to research on victim-precipitation as applied particularly to homicide. Wolfgang found that 26 per cent of his cases fell into this category. Amir found 19 per cent of victim-precipitated rapes. The concept is less applicable to robbery because the confrontation of the victim with the offender usually occurs only at the time of the offense itself. However, « victim-precipitation at distance » is possible in cases of unreasonable self-protective behavior in handling money or goods. Some victims are « careless » and imprudent and create « temptation-opport-

82 ACTA CRIMINOLOGICA

unity » situations. Although our sources are highly unreliable about such data, we found about 11 per cent of careless or victim-precipitated robberies.

Because more than three-quarters of the robberies involving the presence of alcohol are associated with victims, alcohol may also be considered as a «victimogenic» rather than a «criminogenic» element in some robberies (about 12 per cent).

Previous arrest record and violence

Our study reveals that a low proportion of victims (8 per cent) but an exceedingly high proportion of robbers (84 per cent) have a previous police arrest record. Having a previous record is associated with Negro and male victims, although not significantly; but is associated significantly with Negro and male offenders. Victims in other crimes of violence have higher but offenders lower proportions with prior arrest records.

Wolfgang and Ferracuti have recently written about the subculture of violence. « From this subculture... », they argue, « come most violent crimes like homicide, rape, robbery and aggravated assault ». Using different types of indexes of prior police arrest record, our study reveals that when an offender has a previous record, he is much more likely to have a criminal profile of offenses against property than against the person. For example, only 4 per cent of the offenders have a past profile of assault, but 45 per cent have a pattern of robbery, larceny or burglary. There is no significant difference between Negro and white offenders in this respect; neither is there a difference in criminal background between the violent and nonviolent robbers of our study. Robbers, thus, are not a special class, but are primarily thieves who occasionally, though rarely, use force to achieve their objects. The display of violence in this context is on the whole an isolated episode. It is general persistence in crime, not a widespread specialization in crimes of violence, which is the main characteristic of robbers. The term « violent offender class » could not be applied to robbers without distorting the factual data to fit preconceived ideas. Violence is only an occupational risk of a career of non-violent crime. A subculture of theft rather than violence thus seems the best fit with respect to our data, unless we are speaking of a « subculture of violence under control » where violence is used only as a tool and if really necessary. The subculture of VIOLENCE AND ROBBERY 83

violence, in its pure form, seems to have more direct relevance for the other crimes of violence where a larger proportion of offenders with an arrest record have a record of assaults of all kinds than of all types of property offenses combined. Caution should be exercised in this regard, however. In effect, we have isolated the past robbery violations as a separate entity. If these robberies, because of their automatic implicit « potential violence », were to be pooled with the other violent crimes, the hypothesis of a subculture of violence would hold more firmly. More refined data than the ones presented here are needed.

Court dispositions and discrimination

Finally, an investigation of the court disposition reveals that about two-thirds of those taken into police custody, and over three-quarters of those who experienced a court trial were declared guilty. Negroes were convicted only slightly more frequently than whites.

An analysis of the severity of sentences by selected social and legal variables indicates that the following variables are significantly associated with higher court severity: male offender, armed robbery, guilty on two or more bills of indictment, and a prior conviction record for robbery or felony against the person. Although not statistically significant, a young offender (under 21 years of age), a stolen money amount of less than 50 dollars, and an offense with no accomplice and which was not violent, are variables associated with less severe penalties. The most influential element, however, is the number and type of prior criminal conviction, as was found by Green in a more complete study on sentencing in Philadelphia.

The degree of severity by race was more particularly analyzed in this context. The common claim is that criminal courts in the United States practice racial discrimination in sentencing. More specifically, the contention is that Negrowhite offenses are punished the most severely whereas Negro offenders would receive a preferential treatment when the victims are also Negro, because the community norms tolerate a less rigorous enforcement of the law in these circumstances. With appropriate legal variables held constant, however, our data disclose no warrant for such a charge of racial discrimination in sentencing. Variation in sentencing according to

84 ACTA CRIMINOLOGICA

the race of the offender and the victim does exist; Negro-white robbers, for example, receive penitentiary sentences in 61.4 per cent of the Negro-white robberies, whereas Negro-Negro robbers receive this penalty in only 29,3 per cent of the Negro-Negro robberies. However, this finding is a function of intrinsic differences between the races in patterns of criminal behavior. Negro-white robberies are legally more serious than Negro-Negro ones, so that race discrimination in court would not be a correct interpretation of the available data. When the degree of seriousness is controlled, there is no significant difference between the penalties bestowed upon inter- or intraracial robbers. We may add, here, that the pattern of activity in Negro inter-racial robbery generally more closely resembles the pattern of white-white robbery than of Negro-Negro robbery. This tendency suggests the acculturation of the Negro offender to the white criminal culture.

The fault then lies, as Green has also noted, not with the subversion of the judicial system by undemocratic racial attitudes, but with the wall of segregation limiting the Negro's access to culturally patterned norms of deviant behavior as well as conventional behavior. To the degree that the Negro is more closely assimilated to the white middle-class culture value system, his crime rate should decline. Concomitantly, the Negro pattern of crime and punishment received for crime should increasingly approximate the white pattern.

Conclusion

That the Negro patterns of robbery should approximate the white patterns in the future should hold true for all the variables we have investigated in this study: degrees of seriousness and injury, incidence of detection, sex, age, means of attack, temporal, spatial and ecological characteristics of the robberies, the presence of alcohol, previous record, incidence of conviction and type of adjudication... All in all, there is every reason to believe, on the basis of what is now known, that under comparable circumstances to those given whites, the Negro robbery (or even general crime) rate and characteristics would not be substantially different from the white race. It has often been remarked that Negroes are a minority group that still suffers from residential and general cultural isolation from the rest of the community, despite recent advances in integration.

So long as this ethnic group is socially isolated and required to live in restricted residential areas, it will continue to constitute a subcultural area. This subculture is characterized by poor housing, high density of population, overcrowded home conditions, underemployment, and income below the strict necessity: in other words, by limited and restricted opportunities which favor the development and nurture of a system of values that often condones the taking of property (if we are talking of a subculture of theft) or the use of violence if necessary (if we are talking of a subculture of violence, under more or less control) from childrearing processes to adult behavior in the struggle for life. To a lesser degree, whites in the lower socio-economic classes as well as Negroes become part of this subculture of criminality (theft and violence). With respect to homicide, it has been suggested by Wolfgang and Ferracuti that dispersing the group that shares the subculture of violence should weaken the value. Through wider economic opportunities, freedom of residential mobility, etc. integration of the group members into the larger society and its predominant value system should function to destroy or at least to reduce the subculture of violence. To paraphrase this idea, we could say that only by breaking up the culturally isolated group we have found associated with robbery and integrating it into the general community of morality and values can society hope to reduce robbery, or theft in general for that matter (if not crime under all its facets, since deviant behavior of all types has usually a skewed distribution in the social structure in a fashion which designates young adult Negro males living in the slums as the criminal prototypes par excellence).

The other finding of general interest in this study, finally, is the clear difference between robbery and the other crimes of violence (homicide, rape and aggravated assault) on many of the characteristics of victims, offenders or modus operandi of the offenses. Robbery seems to «behave» primarily like a crime against property. This hypothesis could be further buttressed if sound phenomenological studies on crimes against property (burglary, larceny and auto theft) could be done. Up to now, only crimes against the person have been relatively fully assessed.

ANNEX A

Trends in robbery: a correlation matrix

The crimes that concern people most are those that affect their personal safety — at home, at work, or in the streets. The most frequent and serious of these crimes of violence against the person are willful homicide, forcible rape, aggravated assault, and robbery. National statistics regarding the number of these offenses known to the police either from citizen complaints or through independent police discovery are collected from local police officials by the FBI and published annually (since 1930) as a part of its report, « Crime in the United Stated, Uniform Crime Reports » (cited hereinafter as UCR). The FBI also collects « offenses known » statistics for three property crimes: burglary, larceny of \$50 and over and motor vehicle theft. These seven crimes are grouped together in the UCR to form an index of serious crimes.

It is unnecessary here to review the myriad of criticisms leveled against UCR. They have been most systematically reviewed and analyzed by Sellin and Wolfgang (1964).

With due regard to their limitations, let us look, then, at some overall statistics on robbery in the United States across time. The time dimension is obviously of a short span. Prior to 1960, only the years of decennial censuses have usually been chosen, because of the impossibility of securing an adequate population basis for the computation of rates for intercensal years. The years 1960 and 1950 will thus be used. It is not possible to carry the comparison to 1930, because the UCR had only just been organized that year. The years 1960 to 1966, inclusively, are being used because they parallel the period of time chosen for the specific study in Philadelphia. National figures for the intercensal years 1961 to 1966 are available in this case because the UCR has used annual census adjustments for crime rates since 1958.

A preliminary problem is related to the relationships between crimes of robbery and the other index crimes. Robbery is sometimes classified with crimes of violence (homicide, rape, and aggravated assault) and sometimes with crimes against property (burglary, larceny over 50 dollars and auto theft). A cross-analysis of trends in these seven different crime rates could tell us on which side robbery falls off. Such an analysis could also suggest, perhaps, that certain crimes parallel one another from one year to another. It is interesting to question whether all types of crime are likely to go up or down together. If they do, then it does not matter very much which type of crime is selected for the crime index, nor indeed whether all crime known to the police are taken together. If so, a crime index could be much simplified and much more attention could be given to the validity and reliability of the reports about the specific crime or crimes chosen.

TABLE A

Correlation matrix of the 7 UCR index crime rates per 100 000 population: trends from 1958 to 1966

United States

	Homi- cide	Rape	Robbery	Assault	Bur- glary	Larceny	Auto theft
Homicide		0.78	0.73	0.73	0,65	0.64	0.63
Rape	0.78	_	0.94	0.99	0.95	0.95	0.95
Robbery	0.73	0.94	_	0.95	0.98	0.97	0.95
Assault	0.73	0.99	0.95		0.97	0.98	0.98
Burglary	0.65	0.95	0.98	0.97		1.00	0.99
Larceny	0.64	0.95	0.97	0.98	1.00		1.00
Auto theft	0,63	0,95	0,95	0,98	0,99	1,00	-

Table A sets the correlation coefficients relating the 7 UCR index crimes for the years 1958 to 1966, inclusively. It shows significant results in regard to the above two questions. First, it is obvious that robbery is not more closely related to crimes of violence than to crimes against property, because all of the correlations of robbery with the other crimes, with the exception of homicide, are above 0,94. Second, these high correlations indicate that all the different crime rates do vary in close relation with each other. Homicide may also be considered to follow relation with each other. Homicide may also be considered to follow moderately this pattern, because its correlations with the other crimes range between 0,63 and 0,78. A similar diachronic test was made by Wilkins (1963) for England and Wales for the years 1946 to 1959. Contrary to our findings in the United States, Wilkins found consistently low correlation coefficients. His highest correlation, in fact, for the major crimes, was 0.61 (robbery and burglary). He thus concluded (p. 333) that & whatever the explanation, the fact remains that variations from year to year in these rates do not tend to move together... Over time, these crimes do not show similar patterns. The independence of the patterns of incidence of these crimes may be surprising, but one thing is certain, if they are grouped together, then variations in one will obscure variations in they are grouped objective, their variations in one will obscure variations in the others. On the basis of this analysis it seems that separate indices are required... This conclusion is quite contrary to the one we can infer from our own data which shows that the structure of the present UCR index can be validly defended. In effect, the correlations between the seven major crimes are so high that a total average index reflects at the same time the individual pattern of each of these crimes. The total UCR rate is thus meaningful because the items included in it do not tend to mask each other in terms of their variations over time. The UCR's procedure is reasonable because it adds together crimes which behave over time in a similar way. Our data permit us, by the same token, to affirm empirically that it really does not matter very much which type of crime is selected for the crime index, nor indeed whether all crimes known to the police are taken together. Robbery, for example, could be selected as a sole crime index. More attention could then be given to increasing the validity and reliability of the robbery reports. This choice would lead to better national crime statistics, while much simplifying the UCR index system. « More efficiency with less trouble » would be the UCR's motto - that is, if people were interested solely in the increase or decrease of crime in general. However, we think that people are also interested in the invidual figures for the major crimes and will continue to ask for a composite index as the present one. We have no quarrel with this point of view because of the strong empirical interrelations between the major crimes. If our results had been like those in England and Wales, there is no doubt, however, that we would have taken a different approach.

ANNEX B

Quebec: findings and recommendations

The Prévost Commission on crime in Quebec (1969, volume 3) showed that Quebec holds the national crown in the field of armed robbery; sixty-five per cent of the Canadian figures are Quebec's contribution. Other studies also reached this conclusion (Szabo, Tardif and Pronovost, 1969; Quebec Police Commission, 1971).

Even though Quebec may not be in too unfavourable a position vis-à-vis the total of the crimes of violence against property, our province finds itself in an alarming situation for the most dangerous of these crimes.

It is not that Quebec has a monopoly on armed robberies. The Canadian or American statistics show clearly that other regions and various states have known, or are experiencing epidemics similar to that from which we suffer. However, the court and police statistics of Canada show that Quebec for some time has been afflicted every year with

more armed robberies than all the other Canadian provinces combined.

It is also noticed that our questionable fame has spread abroad, and that we are considered today, even in the United States, as the most serious contender for the title of « World Champion of Armed Robbery ».

The findings and recommendations of the Prévost Commission are worth summarizing in order to bridge the gap, in part, between the American data we have reported on in this monograph and the situation in Quebec.

- 1. For many years, Quebec has been constantly afflicted with more armed robberies than all the other Canadian provinces together.
- 2. Quebec has fewer branch banks than Ontario so that there is purpose in looking to these figures for an explanation of the serious Quebec situation.
- 3. If the statistics are established proportionally to the number of branch banks, only British Columbia comes close to the Quebec situation: in 1966 1 branch bank out of 18 was attacked in British Columbia; 1 out of 15 in Quebec.
- 4. The majority of financial losses also are suffered in Quebec: some sources indicate that Canada has lost \$7 million in four and a half years of which Quebec's share was \$4.9 million.
- 5. Quebec is the only province where the armed robberies are consistently the work of groups composed of masked bandits.
- 6. The statistics appear to show a more rapid increase in the number of armed robberies in Ontario than in Quebec.
- 7. The rate of police detection is much lower in Quebec than for all of Canada; in 1967, 64.2 per cent of the 112 Ontario bandits were brought before the courts; 19 per cent of 439 Quebec bandits were arrested and charged.
- 8. The guilty pleas are much more frequent in the Ontario courts than in Quebec: 81 per cent in Ontario against 38 per cent in Quebec.
- 9. Thanks to the definite improvements made recently, the judicial procedures of Quebec in the case of armed robberies are almost as rapid as those of Ontario. In 1964, 284 days against 130; in 1965, 148 days in Quebec against 115 in Ontario.
- 10. In the case of Montreal, the rate of victimization in 1967 was one branch out of five.
- 11. The rate of victimization varies from one branch out of fourteen (1/14) in the case of credit unions to one branch out of three (1/3), in the case of the Provincial Bank and the Toronto-Dominion Bank.
- 12. It appears that some areas, particularly those were access roads are more numerous, are more susceptible to armed robbery: with a number of branches almost the same as that which is found in the center division of the Montreal police (115 against 117), the north division has twice as many armed robberies (44 against 22).
- 13. According to the experts of the Montreal police force, « once out of every four times, different kinds of violence have been committed before, during or immediately after the robbery. In all cases, these acts of violence were purely precautionary and were only intended to frighten. »
- 14. In those cases where it was possible to secure information, the average amount of each robbery was \$5 409.
- 15. The average of the sentences handed down for armed robbery places Quebec almost at the same level as the other Canadian provinces affected by the same plague. For example, if the armed robbery was committed in Quebec, the author received a sentence of six and a half years of detention, six years and three months if it was committed in Ontario, eight years if it was committed in Alberta, eight years and five months if it was committed in British Columbia.
- 16. In an effort to assure the greatest security of their clientele and personnel, and for the better protection of the money entrusted with them, the banking establishments in Quebec have spent in the course of 1967, an amount approximating \$3 million for security measures.

ANNEX 89

17. The number of false alarms coming from banking establishments are surprising: for example, the Montreal police forces replied in one year to 3 884 false alarms, that is an average of approximately 8 false alarms for each branch bank, or each credit union in the City of Montreal.

- 18. The banking institutions whose rate of victimization is the highest are also those which have the least number of false alarms (viz. Bank of Toronto: 12 branches out of 32, 4,7 per branch).
- 19. The available information describes the bank robber as an unmarried man of 27 years of age, little schooling, without any real professional competence and without any definite stability.
- 20. Eight out of the 48 Montrealers found guilty were involved in armed robbery without having ever been condemned for another crime. Furthermore, the group of 38 repeaters are apparently responsible for a large number of crimes of violence of all kinds: assaults, sexual attempts, infractions with regard to offensive weapons...
- 21. The examination of the Quebec statistics with regard to armed bank robberies shows that: 1) The rate of victimization was lower when the bank branches communicated more frequently with police forces; 2) The number of armed attacks is higher and the rate of police detection lower in those regions where police coordination is unsatisfactory.

Recommendation 1

That the Quebec National Assembly revise the Police Act so as to render obligatory a much greater coordination of police forces, and to form regional decision centres which would be given considerably authority over the different police forces of a region or of a large agglomeration.

The Police Act in its present form, does not underestimate the importance of telecommunications amongst the various police forces. We therefore, are limiting ourselves to the hope that there will be an ever-increasing appreciation of the value of an information network with the establishment of a real coordination of police forces.

Recommendation 2

That the regional decision centres should also be information centres available to local or regional police forces.

We believe that the recent amendment adopted by the House of Commons of Canada in the «Omnibus» bill, will permit a closer surveillance of the registration of firearms. Furthermore, the Provincial authority has not yet fully carried out its responsibilities with regard to the application of this Article of the Criminal Code. Undoubtedly, the Code does not go far enough, but Quebec does not even take advantage of what is permitted.

Recommendation 3

That the Quebec government itself issue permits for the carrying of arms and that it verify with the firms selling firearms that for each sale of a firearm there is a corresponding permit.

Conscious of the fact that in Quebec, the worst problem with regard to armed robberies against banking institutions results from the presence and action of organized gangs, we wonder whether the law should be amended to take this into consideration.

In fact, various organisms have recommended to us an increase in the penalties in the case of bank robbers who use disguises to avoid police investigation. Furthermore, in the face of the statistics already given, should there not be an increase in the penalty for the criminal who deliberately participates as a member of an organized criminal gang? This

raises the problem of the part to be played by the judge in the fight against crime. In other words, even in the absence of more severe laws, it is still possible for the Quebec judge to be much harsher if he believes that the only way to fight force is by force. This question points up the whole problem with regard to the deterrent effect of sentences.

We do not ask for longer sentences against those found guilty, but we certainly agree that the judges should consider the fact that an individual is part of an organized band as a critical factor. In other words, criminal association should be considered as an alarm signal. The sentence might not be only longer but it would most definitely call for the entry into the picture of the specialists in human sciences.

We wish to draw attention to the absolute necessity of rehabilitating a much larger number of bank robbers. In fact, the figures indicated that repeaters are responsible for most of these crimes. We know that repeaters are responsible for the majority of these crimes. We have also learned from the studies made by the Institute of Criminology of the University of Cambridge that « the armed robber unquestionnably belongs to the most dangerous category of criminals: operating in gangs, using specific techniques which call for more than average intelligence ». We also know that « these are predators most of the time repeaters, relatively imprevious to the efforts required for an eventual and hypothetical resocialization. These are individuals who are wedded to a criminal life. »

The use of disguises by armed robbers results in part from the fact that these criminals are individuals already known to the police and for whom anonymity is imperative. As already indicated there are exceptions but generally speaking the statement is true. As long as the repeaters will be left to themselves behind the prison walls, they will, upon release constantly return to this type of crime; they will continue to mingle with their own kind, to constantly form new gangs, and they will again use these disguises which frustrate the police in their efforts. For these reasons, it is hoped that an increasing number of bank robbers will be submitted to an appropriate and intensive treatment to break the vicious circle.

Recommendation 4

That the fact that an individual has committed crimes of violence by deliberately and consciously associating himself with an organized group, should be considered by the courts as an aggravating and determining factor calling for an intensive treatment.

In the same way, disguises appear to us to be clear proof of deliberate intent, and we believe that the judges have the right to treat these masked criminals accordingly. The Canadian statistics show that the percentage of arrests is lower as the use of disguises increase. Despite the fact that banking institutions have been using close circuit television, the result is far from satisfactory for the simple reason that the film of a robbery rarely makes it possible to identify the criminals. In addition, disguises result in the police forces having little hope of an immediate arrest unless they happen to be present at the time of the crime. It is extremely difficult to identify the masked bandit after the event, and only the weakest alibi is required to clear the accused.

Recommendation 5

That the Quebec courts consider the masked bandit as a particularly dangerous individual, a fact which should prompt them to conclude that special treatment is absolutely necessary.

We wish to draw attention to the urgency of equipping the metropolitan zone of Montreal with light helicopters which would be under the direct authority of the coordinating Centre covering the entire territory. The conclusive experiments carried out in Los Angeles show that the

ANNEX 91

helicopters could in a large number of cases be the effective answers to our present problem of armed robberies. As the rhythm with which armed robbery attacks occur against banking institutions of the region of Montreal, one or two helicopters could be kept busy constantly.

Recommendation 6

That the police forces of the region of Montreal sign an agreement at the earliest possible moment to put into service light helicopters which would be directly responsible to a metropolitan coordinating and decision-making centre.

Banks and credit union are still uncertain as to whether or not to arm the personnel of their branches. In the past there has been no established policy. Some of the establishments armed their employees or at least certain of them. Other have always preferred not to. Still others during the passage of years, have adopted varying practices.

In our opinion, it is useless and dangerous to arm the personnel of banking institutions. If it is intended that the banks should have constant protection, it would be much better to utilize security personnel specifically trained for this purpose.

Recommendation 7

That no employee of a bank or a credit union be supplied with a firearm, unless his training and his exclusive functions make him a professional in matters of security and the use of arms.

Without always being able to check this, it would appear that some of the bonds stolen during an armed bank robbery or burglary, are never recovered for the very good reason that they are placed in safety deposit boxes of banking institutions and it is even stated that they are used as collateral. Police forces and insurance companies have, in this area, a direct interest in obtaining additional information from the banking institutions.

Recommendation 8

That the police forces and the insurance companies study in collaboration with the banking institutions the possibility of making a more careful check of the collateral used as security with banks.

Notwithstanding the several excellent research projects undertaken recently, the Quebec situation warrants continued and extended research. Only recently have we begun to ask specific questions and yet the essential research work is slow in getting under way.

Recommendation 9

That the Department of Justice of Quebec in collaboration with the Provincial Police and the Montreal Police, undertake or authorize research studies related to armed robberies.

As examples, we quote here without necessarily endorsing the actual wording, the research topics suggested at the Second Congress of Criminology in Quebec (1968) by Mr. Guy Tardif in charge of the Planning Service of the Montreal Police.

- a) Some banking establishments are clearly more victimized than others: the question is to know why.
- b) The protective methods of banks do not appear to be too effective. A further study of this should be made.
- c) Would there be any relationship between the architecture of banking establishments and their rate of victimization

- d) The increased number of false alarms, in addition to being onerous, is in itself a source of danger. These two statements generally accepted in police circles, must be verified.
- e) The study of bank robberies show that the fragmentation of the territory and of the police efforts are a hindrance to effectiveness. What are we waiting for to act in an area where Toronto has preceded us by 10 years, namely to organize « a Metropolitan Police Service »?
- f) Where do these machine guns, pistols and revolvers come from? If it is true that no weapon of this kind is manufactured in Canada, they must be imported in which case, why is it not possible to exercise a better control?
- g) The facility with which certain motor vehicles can be stolen should be the object of a special study.
- h) Is there need for such money in the cash drawers? And, while we are on this subject, why not study the effect of a more general use of cheques and bank notes in almost all transactions?
- i) Shouldn't these preventive measures be supplemented by an efficient information service? Since the police already know the experts in bank robberies recalling that 80 per cent of them have a police record shouldn't the activities of these individuals be observed, if not by following them, at least with the help of electronic equipment?
- j) For those robberies which could not be foreseen, shouldn't the police be able to act more rapidly?
- k) Should there not be a study made immediately of the advantages of utilizing light aircraft and particularly the helicopter, and that not only in emergencies but as a method of patrol?
- 1) What would be the impact of a true judicial police force of the European type in connection with the resolving of bank robberies? Some believe that it will be necessary to reach the stage of professionalizing investigators. This question should also be studied.
- m) Finally, there is reason to take a look at the court and the penal and post-penal agencies regarding the delays in justice, the disparity of sentences, the rehabilitation in institutions, parole. Adequate measures should be undertaken to protect society with regard to individuals who show themselves to be hopelessly anti-social and notorious repeaters.

We believe that the present economic evolution will result in a continuing decrease in the amount of liquid cash in circulation in banks. We therefore do not believe the armed bank robberies in the future will result in greater losses. On the contrary, we already see signs of the bank robbers increasing the number of crimes for smaller amounts. At the present time, the losses caused by bank robberies are much lower than the losses from frauds of all kinds; with time, the difference will be even greater.

In short, the efforts should be carried out on many fronts:

- a) The role of the banking institutions: it would be in the interest of the banks to periodically review their security measures. Furthermore, it would be to their advantage to continue the trend of reducing the liquid cash retained in their branches.
- b) Role of the police forces: the police forces must above all, improve the coordination of their different services. In the Montreal region in particular, it is essential that all the police forces agree to experiment with a light helicopter service to be utilized for patrolling and pursuit. Finally, as the available statistics indicate a lowering in the rate of victimization when there is an increase in the number of false alarms, the police forces should endeavour to retain the advantages of these contacts, while eliminating if possible, the disadvantages and useless costs which result from these incidents.
- c) The role of the judge: in our opinion the judges can, without any risk, consider bank robbers, particularly those who use disguises, as individuals requiring special treatment.

d) The role of the legislator: various measures should make it possible to exercise a more effective control on the sale and registration of firearms. In addition, the Provincial authority should exercise the necessary pressure to put an end to the police fragmentation and to speed up the research work in the different sectors of Quebec criminality.

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102 ACTA CRIMINOLOGICA

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ABSTRACTS

VIOLENCE ET VOL QUALIFIÉ : ÉTUDE DE CAS

Cette étude est une recherche empirique de nature sociologique sur un type de criminalité : le vol qualifié ou vol avec violence. Le vol qualifié est un délit où l'usage de la violence physique ou une intimidation à cet effet est déployé par le criminel afin de prendre illégalement l'argent ou un objet qui appartient à la victime.

Plus de 350 000 vols qualifiés ont lieu chaque année en Amérique du Nord. Toutefois, jusqu'à tout dernièrement aucune recherche phénoménologique n'avait été entreprise sur le vol qualifié. La recherche qui est présentée dans cette monographie essaie donc de décrire les éléments criminologiques qui sont associés au vol qualifié. La situation du vol qualifié dans une grande ville nord-américaine, c'est-à-dire la ville de Philadelphie, U.S.A., est présentée. Il s'agit de l'analyse de 1722 événements de vols qualifiés (un échantillon de 10 pour cent) survenus à Philadelphie de 1960 à 1966. Cette recherche a essayé de saisir les tendances et les modèles (patterns) du vol qualifié dans le temps et dans l'espace. Le modèle statistique utilisé était celui de l'indice de gravité de Sellin et Wolfgang (1964). Le modèle théorique utilisé était celui de Wolfgang et Ferracuti (1967).

Voici quelques conclusions pertinentes: a) L'indice de gravité de Sellin et Wolfgang donne une vision plus juste des tendances et des profils du vol qualifié par rapport aux statistiques policières ordinaires. b) Cet indice de gravité a révélé, par exemple, que les vols qualifiés commis par des jeunes sont aussi graves que ceux perpétrés par les adultes. c) Le vol qualifié exécuté au sein de bandes organisées augmente chaque année. d) Plus de la moitié des vols qualifiés ne comportent aucune violence physique effective. e) Plus de 85 pour cent des vols qualifiés sont commis à l'égard de victimes complètement inconnues des agresseurs. f) Les chances pour un voleur de ne pas être pris par la police sont très bonnes. g) Le vol qualifié est surtout commis par les jeunes qui sont issus de milieux défavorisés. h) Le vol qualifié est surtout lié aux commerces et aux maisons d'affaires plutôt qu'à des particuliers. i) La distance qui sépare les lieux de résidence

104 ACTA CRIMINOLOGICA

de l'agresseur, de la victime, et l'endroit où se produit le vol est semblable aux distances constatées dans l'étude des migrations, des diffusions de messages et des choix maritaux. j) L'alcool est rarement présent autant chez l'agresseur que chez la victime, sauf pour environ 12 pour cent des cas. k) La victime contribue quelquefois à sa propre victimisation, soit environ 11 pour cent des cas. l) La théorie d'une sous-culture du vol plutôt que celle d'une sous-culture de violence peut expliquer le comportement du voleur. m) Il n'y a pas de discrimination raciale au niveau des sentences. n) Tout compte fait, le vol qualifié a plutôt les caractéristiques des crimes contre la propriété que des crimes contre la personne.

VIOLENCIA Y ROBO CALIFICADO: ESTUDIO DE CASOS

Este estudio es una investigación empírica de carácter sociológico sobre un tipo de criminalidad : el robo calificado o robo con violencia. El robo calificado es el delito durante el cual el criminal utiliza la violencia fisica o la intimidación, con el fin de apoderarse ilegalmente del dinero o de algún objeto perteneciente a la víctima.

Más de 350 000 robos calificados tienen lugar cada año en América del Norte. Sin embargo hasta hace poco, ninguna investigación fenomenológica había sido realizada sobre ello. La investigación presentada en esta monografía trata de describir los elementos criminológicos que son asociados al robo calificado. Se trata pues de un análisis de 1722 casos de robos calificados que han tenido lugar en Filadelfia de 1960 a 1966, con una muestra del 10%. Esta investigación ha tratado de tener en cuenta las tendencias y los modelos del robo calificado a través del tiempo y del espacio. El modelo estadistico que se utilizó fué el del indice de gravedad de Sellin y Wolfgang (1964). El modelo teórico fué el de Wolfgang y Ferracuti (1967).

He aqui algunas de las conclusiones obtenidas en el estudio : a) El indice de gravedad de Sellin y Wolfgang da una visión más completa y exacta de las tendencias y de los perfiles de los robos califi-cados que las estadísticas policiales ordinarias. b) Este indice ha revelado, por ejemplo, que los robos calificados cometidos por los jóvenes son tan graves como los cometidos por los adultos. c) El robo calificado ejecutado por bandas organizadas aumenta cada año. d) Más de la mitad de los robos calificados no comportan ninguna violencia física efectiva, e) Más del 85% de los robos calificados son cometidos contra personas completamente desconocidas por los agresores. f) Las posibilidades que tiene un ladrón de no ser sorprendido por la policía son más grandes. g) El robo calificado es sobre todo cometido por jóvenes procedentes de medios desfavorecidos. h) El robo calificado es sobre todo realizado en lugares comerciales y casas de negocios más bien que en domicilios particulares. i) La distancia que separa los lugares de residencia del agresor, de la victima y el lugar donde se produce el robo, es semejante a la distancia constatada en el estudio de migraciones, de difusión de mensajes y de escogencia marital. j) El alcohol rara vez se presenta en el agresor o en la víctima, salvo en un 12% de casos. k) La víctima contribuye algunas veces a su propia victimización; alrededor del 11% de casos. l) La teoría de una sub-cultura del robo puede explicar mejor el comportamiento del ladrón que la teoría de una sub-cultura de la violencia. m) No hay discriminación racial al nivel de las sentencias, n) El robo calificado tiene más bien las características de crimenes contra la propiedad que las de crimenes contra la persona.

RAUB UND GEWALT

Es handelt sich um eine empirisch-soziologische Untersuchung über eine bestimmte Art krimineller Handlung, und zwar um den Raub (vol qualifié). Der Raub ist eine verbrecherische Handlung, bei welcher physische Gewalt oder Drohung verwendet werden, um sich des dem Opfer gehörenden Geldes oder irgend eines anderen Gegenstandes rechtswidrig zu bemächtigen.

ABSTRACTS 105

In Nordamerika finden jährlich über 350 000 Raubhandlungen statt. Trotzdem wurde bis zur jüngsten Zeit keine phänomenologische Untersuchung über den Raub unternommen. Die in der vorliegenden Monographie dargestellten Forschungen versuchen, die kriminellen Merkmale des Raubes zu beschreiben. Es werden die Zustände in einer grossen nordamerikanischen Stadt, d.h. in Philadelphia, in Bezug auf den Raub dargestellt, indem 1722 Raubüberfälle analysiert werden. Dies sind 10% aller Raubüberfälle, die in Philadelphia von 1960 bis 1966 erfolgten. Die vorliegende Forschung versucht, Tendenzen und Verhaltensmuster des Raubes in Bezug auf Zeit und Raum zu bestimmen. Als statistisches Modell wurde der Index der Schwere von Sellin und Wolfgang (1964) verwendet. Gebraucht wurde das theoretische Modell von Wolfgang und Ferracuti (1967).

Einige treffende Schlussfolgerungen konnten gezogen werden: a) Der Index der Schwere von Sellin und Wolfgang ergibt ein genaueres Bild der Tendenzen und Profile des Raubes als die gewöhnlichen Polizei-Statistiken. b) Der Index der Schwere hat z.B. gezeigt, dass die von Jugendlichen ausgeführten Raubüberfälle ebenso schwer sind wie diejenigen von Erwachsenen, c) Die Zahl der von organisierten Banden ausgeführten Raubüberfälle nimmt von Jahr zu Jahr zu, d) Mehr als die Hälfte der Raubüberfälle werden ohne effektive Gewaltanwendung ausgeführt. e) Mehr als die Hälfte der Raubüberfälle werden an Opfern begangen, die den Tätern völlig unbekannt sind. f) Die Chance für einen Räuber, nicht erwischt zu werden, ist sehr hoch. g) Der Raub wird hauptsächlich von Jugendlichen ausgeführt, die aus den ökonomisch niedrigen Bevölkerungsschichten stammen. h) Der Raub trifft Geschäfte und Handelsfirmen eher als Privatpersonen. i) Die Entfernungen zwischen dem Wohnsitz des Täters, demjenigen des Opfers, und dem Tatort sind denjenigen ähnlich, die bei Migrationen, bei der Verbreitung von Botschaften und bei Ehewahlen festgestellt werden, j) Alkoholeinfluss ist bei kaum mehr als 12% der Täter und der Opfer nachweisbar. k) Bei ca. 11% der Raubüberfälle trägt der Geschädigte zu seiner eigenen Schädigung bei. l) Das Verhalten des Raubtäters ist eher mit dem Postulat einer « Subkultur des Diebstahls » als mit einer « Subkultur der Gewalt » vereinbar. m) Bei den Gerichtsurteilen wurde keine Rassendiskriminierung festgestellt. n) Im ganzen genommen zeigt der Raub eher die Charakteristika des Verbrechens gegen den Besitz als des Verbrechens gegen die Person.

НАСИЛИЕ И КВАЛИФИЦИРОВАННАЯ КРАЖА: ИССЛЕДОВАНИЕ СЛУЧАЯ

Настоящий очерк представляет эмпирическое расследование социологического характера вида преступности: квалифицированная кража, или кража с насилием. Квалифицированная кража является правоварушением (преступлением), при котором преступник проявляет физическое насилие, или запугивание (устрашение), с целью завладеть противозаконно деньгами или каким-либо предметом, припадлежащим жертве.

Каждый год в Северной Америке совершается более 350 000 квалифицированных краж. Тем не менее, до вастоящего времени не было предпринято никакого феноменологического исследования вопроса квалифицированных краж. Таким образом, в исследовании, представляемом в настоящей монографии, мы пытаемся описать криминологические элементы, связанные с квалифицированной кражей. Рассматривается обстановка квалифицированной кражей. Рассматривается обстановка квалифицированной кражи в большом североамериканском городе, в Филадельфии, США. Авализируется 1 722 случая квалифицированных краж (образец 10%), имевших место в Филадельфии от 1960 до 1966 года. В этом исследовании сделана попытка понять, уловить тенденции и шаблоны — стиль, карактер, квалифицированной кражи во времени и пространстве. Примевен статистический образец—шаблон Селлина и Вольфганга (1964) — как показатель тяжести правонарушения. Использован теоретический образец Вольфганта и Ферракути (1967).

Ниже приведены относящиеся к делу заключения: а) Показатель степени тяжести (важности) преступления Селлина и Вольфганга дает более верную, правильную картину тенденций и профилей квалифицированных краж. чем обычные полицейские статистики. б) Этот показатель степени тяжести преступления обнаружил, например, что квалифицированные кражи, совершенные молодыми людьми, являются столь же тяжкими, как и кражи. совершенные взрослыми. в) Квалифицированные кражи, совершаемые в среде организованных банд, умножаются с каждым годом. г) Больше подовины квалифицированных краж не сопровождаются никаким физическим насилием. д) Больше чем 85% квалифицированных краж совершаются у жертъ, которые совершенно незнакомы агрессорам. е) На стороне вора есть весьма много шансов не быть пойманным полицией. ж) Квалифицированные кражи совершаются главным образом молодыми людьми, выходцами из среды людей, живущих в неблагоприятных условиях. в) Квалифицированные кражи совершаются главным образом в торговых и деловых предприятиях, а не у частных лиц. п) Расстояние, отделяющее место жительства агрессора от его жертвы, и место, где совершается кража подобно расстояниям, установленным при изучении миграций, передач извещений и выборов в браке. к) Только приблизительно в 12% случаев агрессор иле его жертва бывают под влиянием алкоголя. л) Иногда жертва сама способствует своему мучению: около 11% случаев. м) Поведение вора может быть объяснено скорее теорией пониженного культурного развитин, чем теорией культуры насилия. н) При вынесении приговоров не имеется расовой дискриминации. о) Приняв все вышеизложенное во выиманне, считаем, что квалифицированная кража носит характерные черты преступлений против собственности, чем преступлений против личности.

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