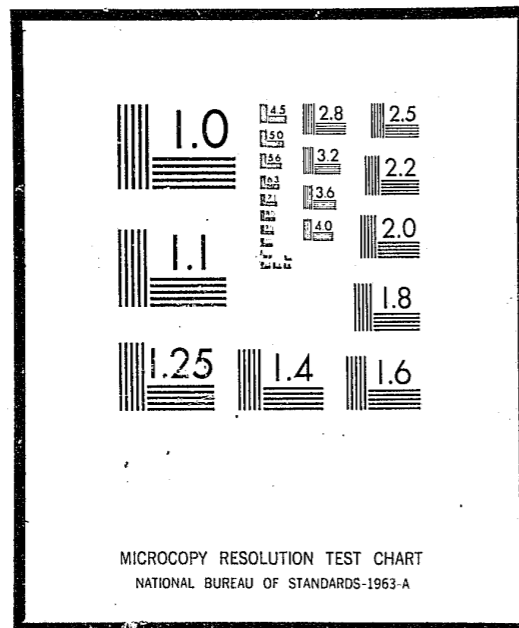


NCJRS

This microfiche was produced from documents received for inclusion in the NCJRS data base. Since NCJRS cannot exercise control over the physical condition of the documents submitted, the individual frame quality will vary. The resolution chart on this frame may be used to evaluate the document quality.



Microfilming procedures used to create this fiche comply with the standards set forth in 41CFR 101-11.504

Points of view or opinions stated in this document are those of the author(s) and do not represent the official position or policies of the U.S. Department of Justice.

U.S. DEPARTMENT OF JUSTICE
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION
NATIONAL CRIMINAL JUSTICE REFERENCE SERVICE
WASHINGTON, D.C. 20531

Date filmed

12/19/75

18464

AUTOMATION AND BURGLARY

An

Experimental Design For the Feasibility

Of Automated Crime Analysis of The

Incidents of Burglary

Reported in Chicago

Sgt. John Culloton
Burglary Section - Area 5
Chicago Police Department

INDEX	PAGE
I. INTRODUCTION	1
a). Literature Review	10
II. HYPOTHESIS	16
III. DESIGN	18
a). Subjects	19
b). Procedures	19
c). Measures	20
IV. RESULTS	25
V. DISCUSSION	26
VI. DIRECTION FOR FUTURE RESEARCH	30
FOOTNOTES	32
Figure #1	5a
Figure #2	19a

I. INTRODUCTION

In the various communities of the United States, the rates of burglary will vary with the degree of susceptibility of that crime and the awareness of the public to the burglary potential in those communities. It is the collective responsibility, of both the police and the public, to develop and implement counter measures to deal with this problem.

It is my contention that Chicago is susceptible to the crime of burglary due to a lack of awareness of the burglary problem in detail. This lack of awareness is manifested by both the police and the public, hence burglary accounts for forty percent of the city's serious index crime. While the police are well aware of the burglary problem, in general; they, or we if you will, have made no significant efforts to learn about it in detail. When the police are unaware of the full significance of the burglary problem, how can we expect to have an informed community; who must rely on the police for the dissemination of information.

It is my postulate that the police service throughout the nation, not only Chicago, lack the necessary modern systematic means of recording the available data on burglary incidents which is so essential to implementing programs to reduce this crime. The data that is recorded, is of little value in implementing programs to reduce burglaries. For the most part, the data that is recorded is of an abridged nature for use in annual reports.

This paper takes the stand that modern systematic methods, computerization, of burglary incidents will not only be an investigative aid, but also could be the catalyst for meaningful preventive programs.

Modern crime analysis is a system of examining criminal activity phenomena for the purpose of identifying patterns or trends where they may exist.² Crime analysis is an elaboration and expansion of the traditional modus operandi file systems, which were concerned primarily with the detection of an offender by means of recorded information concerning the characteristics of his criminal activity.

While traditional M.O. file systems have sufficed in the past, for want of a better system, they have out lived their effectiveness in modern society. We must be conscious of the greatly increased rate of obsolescence that has been projected into such systems by the recent increase in criminal activity. The increase in criminal activity that has been demonstrated in the past two decades demands that technical advancement be made in this area.

This project will suggest that a fully automated crime analysis system be designed and utilized by the Burglary Section to replace the existant archaic manual means of developing crime analysis information. I do not mean to imply that systematized crime analysis would not be effective as a tool for combating other crimes. It would be and should be developed. I suggest that this project be developed by the Burglary Section, and then expanded to include other crimes once the system has been established. Burglary is selected as the target crime for this project on the basis of its volume and characteristics.

In 1973 the Burglary Section of the Chicago Police Department received 76,904 cases, an increase of 14,792 from the 1972 total of 62,107. This one section of the Chicago Police Department received more reports of Index Crime for the year 1973, than the State totals

of Index Crime for 28 of the 51 jurisdictions reporting in the Uniform Crime Reports of 1971.³ The task of developing this enormous volume of information into meaningful crime analysis patterns was left to two patrolmen assigned to the Burglary Section Headquarters unit. It is no wonder that the Crime Patterns which are released by the Burglary Section leave much to be desired.

The information of an effective Crime Analysis System must be timely, recorded and available to be of value. When intelligence is not centralized and coordinated, planning for the purpose of either solving crimes or apprehending specific criminals is almost impossible.⁴ To expect retention in the mind of the various preliminary and follow-up investigators is unrealistic due to the volume of the data involved. One of the most important functions of the Crime Analysis operation is to identify crime trends and predictively project criminal activity. By effectively analyzing crime data the Analysis Section can identify crime patterns or changes in patterns and make such information available to others for operational utilization. In addition, crime analysis can undertake the task of identifying potential crime targets for the deployment of manpower.⁵ While the Chicago Police Department's crime analysis systems may have been adequate for the early 1960's, and this I doubt, it is certainly out of date in the mid-1970's. Three model crime analysis systems were recently studied by the California Crime Technological Research Foundation;⁶ manual, semi-automated, and fully automated - for small, medium, and large agencies respectively. There is no doubt that Chicago is a large city, yet we still use the crime analysis system of a small city. We require a fully automated system - one that utilizes the potential of the modern day computer.

The characteristics of the crime of Burglary are correlative, that is they are those conditions and circumstances which can be placed into mutual or reciprocal relation and can establish a connection. Such correlations could, and do, form spatial distributions which we call "patterns". Burglary is one of those crimes which definite methods of operation can be established. Very frequently the "method of operation" of a particular criminal is the only investigative lead available to the burglary investigator.

The above statement is in contradiction to the theories of O'Hara who states, "It has been found that the M.O. File is most effective in crimes involving personal contact, such as felonies against the person, confidence games, and forgery." ⁷ Yet, all of the crimes that he mentions have a victim which more than likely had a physical confrontation with the offender, who they can later hopefully identify. In these cases the method and means may not be as important as the physical description.

O'Hara points out the criminal ordinarily judges the value of his methods solely on the basis of successful accomplishment. He frequently repeats his actions stemming from superstition, lack of imagination and inertia. ⁸ Because offenders differ in their mix of skills, preferences, and methods of operation they will seek targets which have the crime-attracting characteristics they prefer. ⁹ The old cliché that you can't argue with success holds true and most career criminals won't modify or change their style of act until apprehended or almost apprehended.

Traditional Method of Operation arrangements as they pertain to burglary investigations are; type of building, manner of entrance and exit, day and time of occurrence, tools used, property taken and

locations of occupants at the time of occurrence. The present Burglary Case report of the Chicago Police Department does call for this information, but with different degrees of emphasis on the assorted facts which make up the total method of operation file. The Burglary Report is a form type, similar to those used by many police departments. Emphasis is made on those boxes, in the form, which have a shaded portion. (See figure #1) This emphasised information will be used for the computation of an annual report by the Data Systems Division. Information for use in crime analysis patterns must be extracted from these reports manually.

The Chicago Police Department has the perfect vehicle for computerized crime analysis systems in it's newly acquired computer. The computer as a data storage center, plus the terminal outlets in each District and Area headquarters, would be an unbeatable team in modern crime analysis systems. The only modification that would have to be made is to program the computer for retention and dissemination of this data.

A modern, effective fully automated crime analysis system for burglary patterns is possible by computerizing ten major characteristics and sub-classification potential of an additional one hundred characteristics, all of which can be coded for printout data. The characteristics are;

1. Record Division Identification Number
2. Beat of Occurance
3. Classification
 - a. Burglary - Forcible Entry
 - b. Burglary - Unlawful Entry
 - c. Burglary - Attempt Forcible Entry
4. Day of Week
 - a. Sun b. Mon c. Tue d. Wed
 - e. Thu f. Fri g. Sat h. Unknown

and its description, (include inventory numbers.) Offenders approximate description, if possible, should include name if known, nick-name, sex, race, age, height, weight, color eyes, hair, complexion, scars, marks, etc. If suspect is arrested, give name, sex, race, age, C.B. or I.R. number, if known, and state, "In Custody." If property taken was "scribed" for OPERATION IDENTIFICATION indicate I.D. number at end of narrative.

BURGLARY CASE REPORT/ CHICAGO POLICE

1. OFFENSE/CLASSIFICATION (ONE SQUARE MUST BE CHECKED) <input type="checkbox"/> 400 FORCIBLE ENTRY <input type="checkbox"/> 440 UNLAWFUL ENTRY (NO FORCE) <input type="checkbox"/> 470 ATTEMPTED FORCIBLE ENTRY			2. BEAT OR UNIT ASSIGNED			3. BEAT OF OCCURRENCE					
5. ADDRESS OF OCCURRENCE			6. DATE OCCURRED DAY MO. YR.			7. PERIOD OF DAY OCCURRED <input type="checkbox"/> 1 DAY-TIME <input type="checkbox"/> 2 NIGHT <input type="checkbox"/> 3 UNKNOWN			8. DATE REPORTING OFFICER(S) ARRIVED DAY MO. YR.		
9. TYPE OF PREMISES WHERE OCCURRED			11. HOME ADDRESS (IF BUSINESS, INDICATE COMPANY REPRESENTATIVE)			12. HOME PHONE			TIME AVAILABLE		
<input type="checkbox"/> 11 SCHOOL <input type="checkbox"/> 13 CHURCH <input type="checkbox"/> 21 TAVERN OR LIQUOR STORE <input type="checkbox"/> 23 CLEANING STORE <input type="checkbox"/> 24 SUPERMARKET <input type="checkbox"/> 26 GAS STATION			<input type="checkbox"/> 28 RESTAURANT <input type="checkbox"/> 29 LAUNDROMAT <input type="checkbox"/> 30 APPLIANCE STORE <input type="checkbox"/> 32 OFFICE <input type="checkbox"/> 31 SMALL RETAIL STORE - SPECIFY TYPE			<input type="checkbox"/> 59 HOUSE <input type="checkbox"/> 60 APARTMENT <input type="checkbox"/> 61 WAREHOUSE <input type="checkbox"/> 53 RESIDENCE GARAGE <input type="checkbox"/> 99 OTHER - SPECIFY					
10. VICTIM'S NAME (FIRM NAME IF BUSINESS)			SEX			RACE			YEAR OF BIRTH		
11. HOME ADDRESS (IF BUSINESS, INDICATE COMPANY REPRESENTATIVE)			APT. NO.			13. BUSINESS PHONE			TIME AVAILABLE		
10. VICTIM'S NAME (FIRM NAME IF BUSINESS)			SEX			RACE			YEAR OF BIRTH		
11. HOME ADDRESS (IF BUSINESS, INDICATE COMPANY REPRESENTATIVE)			APT. NO.			13. BUSINESS PHONE			TIME AVAILABLE		
10. VICTIM'S NAME (FIRM NAME IF BUSINESS)			SEX			RACE			YEAR OF BIRTH		
11. HOME ADDRESS (IF BUSINESS, INDICATE COMPANY REPRESENTATIVE)			APT. NO.			13. BUSINESS PHONE			TIME AVAILABLE		
14. PERSON REPORTING CRIME TO POLICE (IF VICTIM, PRINT "VICTIM")			SEX/RACE			15. HOME ADDRESS (IF VICTIM PRINT "DNA" IN BOXES 15-17.)			APT. NO. 16. HOME PHONE 17. BUSINESS PHONE		
18. PERSON WHO DISCOVERED CRIME (IF VICTIM, PRINT "VICTIM")			SEX/RACE			19. HOME ADDRESS (IF VICTIM PRINT "DNA" IN BOXES 19-21.)			APT. NO. 20. HOME PHONE 21. BUSINESS PHONE		
22. WITNESS' NAME			SEX/RACE			23. HOME ADDRESS			APT. NO. 24. HOME PHONE 25. BUSINESS PHONE		
26. POSSIBLE TYPE OF TOOL(S) USED IN MAKING ENTRY			27. POSSIBLE POINT OF ENTRY (EXAMPLE: FRONT DOOR, BACK DOOR)								
28. POSSIBLE POINT OF EXIT (EXAMPLE: FRONT DOOR, BACK DOOR)			29. UNUSUAL CHARACTERISTICS OF CRIME (TRADEMARK)								
30. IF HOUSE OR APARTMENT, WHERE WERE OCCUPANTS?			31. NO. OF OFFENDERS			32. OFFENDER'S NAME			Sex/Race Age Height Weight Hair Eyes Comp.		
33. WERE OFFICE MACHINES TAKEN ON PREMISES?			34. BURGLAR ALARM CIRCUMVENTED			35. EVID. TECH. CR. LAB NOTIFIED			37. IF SAFE BURGLARY, METHOD USED		
<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO			1 <input type="checkbox"/> Peel 2 <input type="checkbox"/> Drill 3 <input type="checkbox"/> Punch 4 <input type="checkbox"/> Torch 5 <input type="checkbox"/> Removed 6 <input type="checkbox"/> Open 7 <input type="checkbox"/> Explosive		
38. VEHICLE (YEAR MAKE) USED BY OFFENDERS?			BODY STYLE			COLOR			STATE LIC. NO. STATE YEAR OTHER FACTS		
39. NAME OF INVESTIGATOR AND/OR YOUTH OFFICER NOTIFIED			TIME			VEHICLE OR TRAILER STOLEN			42. NARRATIVE ON REVERSE SIDE		
<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO			43. EXTRA COPIES REQUIRED (NO. & RECIPIENT)			44. DATE INVESTIGATION COMPLETED		
40. PROPERTY TAKEN DESCRIBE IN NARRATIVE ALL PROPERTY TAKEN			41. PROPERTY RECOVERED (DESCRIBE IN NARRATIVE ALL PROPERTY RECOVERED)			43. EXTRA COPIES REQUIRED (NO. & RECIPIENT)			44. DATE INVESTIGATION COMPLETED		
MONEY <input type="checkbox"/> \$			JEWELRY <input type="checkbox"/> \$			FURS <input type="checkbox"/> \$			CLOTHING <input type="checkbox"/> \$		
HOUSEHOLD ITEM <input type="checkbox"/> \$			CONSUMER ITEM <input type="checkbox"/> \$			FIREARMS <input type="checkbox"/> \$			NARCO./DANG.DRUGS <input type="checkbox"/> \$		
MONEY <input type="checkbox"/> \$			JEWELRY <input type="checkbox"/> \$			FURS <input type="checkbox"/> \$			CLOTHING <input type="checkbox"/> \$		
HOUSEHOLD ITEM <input type="checkbox"/> \$			CONSUMER ITEM <input type="checkbox"/> \$			FIREARMS <input type="checkbox"/> \$			NARCO./DANG.DRUGS <input type="checkbox"/> \$		
45. REPORTING OFFICER (Print or Type) STAR NO.			46. REPORTING OFFICER (Print or Type) STAR NO.			47. SUPERVISOR APPROVING			STAR NO.		
SIGNATURE			SIGNATURE			DATE DAY MONTH YEAR			TIME		

5. Time
 - a. 0000 - 0600
 - b. 0600 - 1200
 - c. 1200 - 1800
 - d. 1800 - 2400
 - e. Unknown
6. Premises
 - a. Residential
 - 1) House
 - 2) Flat
 - 3) Apartment
 - 4) High-rise Apartment
 - 5) Garage / Shed
 - b. Non-Residential
 - 1) School
 - 2) Church
 - 3) Park
 - 4) Public Building
 - 5) Tavern / Liquor Store
 - 6) Restaurant
 - 7) Cleaners / Laundry
 - 8) Appliance Store
 - 9) Supply Store
 - 10) Jewelry Store
 - 11) Small Retail Store
 - 12) Supermarket
 - 13) Office
 - 14) Doctor - Dentists Office - Drug Store
 - a. Narcotics taken
 - b. Narcotics not taken
 - 15) Gas Station
 - 16) Commercial Garage
 - 17) Auto Agency
 - 18) Warehouse
 - 19) Railroad property / Box Car
 - 20) Factory
 - 21) Storage Shed
 - 22) Other
7. Point of Entry
 - a. Door
 - 1) Front
 - 2) Side
 - 3) Rear
 - b. Window
 - 1) Front
 - 2) Side
 - 3) Rear
 - c. Wall
 - 1) Front
 - 2) Side
 - 3) Rear
 - d. Roof
 - e. Floor
 - f. Other
8. Alarm on Premises
 - a. Circumvented
 - b. Not circumvented

- 9. Tools Used for Entry
 - a. Pry
 - b. Lock Puller
 - c. Cutting Tool
 - d. Blunt Object
 - e. Physical Force
 - f. None
 - g. Other
- 10. Evidentry Matter Available
 - a. Witness
 - b. Evidence
 - 1) Evidence Identification Number
 - a) Standards
 - b) Tool Marks
 - c) Fingerprints
 - d) other

It is quite clear that the variables of an effective burglary crime analysis pattern are numerous. The wide range of these variables and their correlation rule out manual means of analysis. Yet, this same number of variables are just a drop in the bucket of an effective computerized crime analysis system.

In this introduction I have discussed two reasons for selecting burglary as the target crime of a modern crime analysis system, the volume of burglaries and the characteristics which can be correlated into patterns. I would now like to discuss a final argument for the selection of burglary as the target crime. The creation of public awareness to the burglary potential.

In 1967, Senator Robert F. Kennedy delivered an address at Columbia University in which he stated that seventy percent of the people who live in the cities of our nation have their freedom threatened by crime. In the same year, the presidents Crime Commission reported that fear of crime makes many people want to move their home. In Chicago, it was reported that twenty percent of the population wanted to move.¹⁰ The pressure of crime has not deminished in the several years since these statements were made.

The fear of violent crime causes many people to interpret increases in crime with the dominant sterotype of crimes of violence. People stay off the streets after dark, avoid public gatherings, drive to and from work to avoid public transportation, all because of a fear for their own personal safety. At the same time they fail to protect themselves from the more prevalent crimes against property.¹¹ When they become the victim of a property crime, and it is statistically more probable, it is the catalysis to cause them to move or relocate their home or¹² business to another area.

A recent report of the Law Enforcement Assistance Administration showed that "... among incidents of completed burglary, the rate for unlawful entry without force was significantly higher than that for forcible entry."¹³ This can only be attributed to the lack of awareness of the public to the burglary potential. I suggest that we can create an awareness of the burglary problem, by the public, through the dissemination of crime analysis data to the public. The public has a right to know when and how they are most vulnerable to attack. They also have a right to know what the police are doing to counteract criminal activity. But more important, they will have to know what the true crime picture is if they are to participate in crime prevention programs.

Word of mouth, publicity by media, and talks before community organizations are among the many ways crime analysis information can be disseminated. At the same time recruitment can be made of the public to assist the police in crime prevention programs.¹⁴ The public wants more foot patrols and an expression of concern by the police for local conditions.¹⁵ I can't help but feel that if beat officers were to obtain an up-to-date computer printout of burglary

incidents on their respective beats, and then passing this information on to the residents of the community, that there would be a reduction in the burglary experience for that area. I can't think of a better form of community relations. Such action would improve the reputation of the police agency through a personalized concern for crime problems of the community.

Now I don't suggest that the beat officer contact every resident on his beat, that would be impractical and would not develop a "sense of community" that is so essential to crime prevention programs. ¹⁶ What I do suggest is that the beat officer select an area where the potential for burglary is present, as depicted by crime analysis data, and then get out of his car and talk to residents of a selected number of scattered homes. He could explain the vulnerability of the area to a particular type of crime that has been occurring and the preventive measures necessary to combat this type of offense. He would request that the person being contacted pass the information on to their neighbors on each side of his residence or business. Let the neighbors talk about the policeman who walked up to their house and told that certain preventive measures should be taken. Let the neighbors talk about local crime conditions. Let the community become aware. Let the community become involved, but let it become involved as a community.

If a community knows that an open side window is an invitation to a burglar, aware of the potential, they may close and lock the window when they leave the house. If the public is aware of the burglary potential they may report that "suspicious" man in a gangway, rather than disregard him as a delivery man.

I a LITERATURE REVIEW

Egon Bittner

The Functions of the Police in Modern Society, National Institute of Mental Health Center for Studies of Crime and Delinquency, U.S. Gov't. Printing Office Washington D.C. 1970

This work by Bittner is an analysis of the basic character of police work and relates it to the courts and community with which it is intricately involved. Cultural and historical factors that influence police functions are considered, along with popular conceptions of police work. From these broad perspectives the analysis moves to consider the impact that police organization exerts upon the policeman's functioning. The organization of the police, their "esprit de corps" and code of secrecy, and their capacity to use force are reviewed and woven into the analysis.

The monograph also considers the future of police work. The problems of upgrading police practice, streamlining police organization, and improving the recruitment and training of police are given specific attention.

Norman K. Denzin

The Research Art, Aldine Printing Co. Chicago Ill. 1970

A textbook of research methodology, this book suggests principles of research and how to use research to construct and test theories. It brings coherence to the study of methods by analyzing the five major approaches to experimentation; survey research, participant observation, live history, and unobtrusive measures.

The section dealing with unobtrusive measures was of particular interest and aid in the presentation of this work.

Richard J. Healy
Timothy J. Walsh

Industrial Security Management, American Management Association, Inc. New York, New York. 1971

In dealing with security problems and solutions, the function of this book as a management tool as been kept in prime focus. The book was written to provide management with a systematic approach to improving the quality of security operations and to assure a better balance between the costs of protection and the cost of loss.

John Lofland

Analyzing Social Settings, Wadsworth Publishing Co. Belmont, California. 1971

This study is designed to specify what qualitative analysis is and how it differs from quantitative analysis. Recommendations are made as to how one can store and organize his materials the better to facilitate more acute observation, developing analysis, and actually writing.

Charles E. O'Hara

Fundamentals of Criminal Investigation,
2nd Edition, Charles C. Thomas, Springfield
Ill. 1970

This book is one of the best sellers of Criminal Justice literature, having sold over 100,000 copies in two editions and six-teen printings. The book, as its title indicates, serves as a presentation of the fundamentals of criminal investigations. The presentation is directed to the beginning student of the art of investigation. Due to its wide acceptance in Criminal Justice circles it has served as a basis of comparison with other findings. Many of the hypotheses presented in this work are now, and will continue to be, acceptable theories for dealing with criminal investigations.

Eugene J. Webb
Donald T. Campbell
Richard D. Schwartz
Lee Sechrest

Unobtrusive Measures, Rand McNally and
Company, Chicago Ill. 1963

The authors deal with the ethical issues in gathering research data. The authors attempt to provide alternatives by which ethical criteria can be met without impinging on important interests of the research subjects. Some of the methods described, such as the use of archival records and trace measures, may serve to avoid the problems of invasion of privacy by permitting the researcher to gain valuable information without ever identifying the individual actors or in any way manipulating them.

COMMISSION REPORTS

Nicholas deB. Katzenbach
Chairman

The Challenge of Crime in a Free Society,
A report by the President's Commission on
Law Enforcement and Administration of
Justice. U.S. Gov't. Printing Office,
Washington D.C. 1967

An examination of every facet of crime and law enforcement in the United States. The summarization of these findings and recommendations for improvement were included in this work. In addition, detailed publications were presented, under separate cover, for the various facets studied.

Thomas R. Mulroy
Chairman

Police and Public; A Critique and a Program.
Final Report of the Citizens' Committee to
Study Police-Community Relations in the City
of Chicago, Chicago Ill. May 22, 1967.

On July 25, 1966, Mayor Richard J. Daley created the Chicago Citizens' Committee to Study Police Community Relations, with the request that, after concluding its research and deliberations, it recommend to him positive programs to achieve a closer understanding between the police and the citizens they serve.

National Advisory Commission on Criminal
Justice Standards and Goals - Working Papers.
U.S. Gov't. Printing Office, Washington
D.C. Jan 1973.

A commission established by the President of the United States to establish standards and goals for criminal justice agencies in the United States. This commission reviewed the progress made by the various agencies of criminal justice and recommended improvements to those agencies. Recommendations were made which would standardize many of the operational procedures in the various jurisdictions. Many of the same areas reviewed by the prior presidential commission were again reviewed.

NATIONAL INSTITUTE OF LAW ENFORCEMENT AND CRIMINAL JUSTICE DOCUMENTS

Oscar Newman

Architectural Design for Crime Prevention,
Institute of Planning and Housing, New York
University, New York, N.Y. 1973

This study introduces the concept of "defensible space", which suggested that by grouping dwelling units in a particular way, by paths of movement, by defining areas of activity and their relation to other areas, and by providing for visual surveillance, one could create - in inhabitants and strangers - a clear understanding of a space and its intended users.

Anonymous

Crime in the Nation's Five Largest Cities -
National Crime Panel Surveys, Advance Report
NCJI&S, April 1974

Crime in Eight American Cities - National
Panel Surveys, Advance Report. NCJI&SS,
1974.

The surveys, conducted for the Law Enforcement Assistance Administration by the U.S. Bureau of the Census, were part of the National Crime Panel, a new instrument for measuring levels of crime both nationwide and in selected large cities. The panel, relying on scientific sampling procedures, gauges the extent to which individuals, households, and commercial establishments have been victimized by selected crime.

Carol B. Kalish

Crimes and Victims, A Report on the Dayton
San Jose Pilot Survey of Victimization. NC
JI&SS, June 1974.

Victimization surveys were made in both cities. The purpose of the pilot survey was to provide in two different metropolitan settings a full field test of survey methods and techniques as well as of the survey instrument itself. Different procedures were used in both surveys and that was part of the test. The methods were interesting, though confusing.

Anonymous

Criminal Victimization in the United States,
January - June 1973 - A National Crime Panel
Survey Report - VI, 1974

A continuing survey of households and commercial establishments, gauges the extent to which certain types of crime are committed. It attempts to show relationships between the offenders and victims of crimes.

Anonymous

Call for Citizen Action - Crime Prevention
and the Citizen, National Advisory Commission
on Criminal Justice Standards and Goals. 1974

This document attacks what appears to be one of the major deterrents to citizen action; the relative paucity of information about 1) the many different crime prevention activities available to the police and 2) the experiences of citizens -- individually and collectively -- who have implemented those activities. It exhorts the reader to become involved in anticrime efforts and outlines what can be done.

Anonymous

Crime Scene Search and Physical Evidence
Handbook, NCJI&SS, 1974

The methods of searching crime scenes and gathering physical evidence without altering that evidence. Guidelines are set for collecting evidence most frequently found at crime scenes or upon the persons of offenders-victims. Procedures are established to safeguard the matter once it has been collected.

Anonymous

High Impact Anti-Crime Program, NCJI&SS,
July 1974

The program was designed by the Law Enforcement Assistance Administration to demonstrate, in eight large cities, the effectiveness of comprehensive, crime-specific programs in reducing stranger-to-stranger crime and burglary. The study deals with an evaluation of Adult and Juvenile Corrections, an evaluation of a court component, the police evaluation component, and a target hardening, street lighting, evaluation component.

Michael Gardner

Improving Police Community Relations
Governor's Public Safety Commission,
Boston, Massachusetts. May 1973

This report represents an effort to identify various police operational and organizational practices specifically aimed at the improvement of police-community relations. Emphasizes the need for stressing improved community relations in all major police activities.

Harry A. Scarr

Patterns of Burglary, NCJI&SS, February
1972.

An attempt to draw what conclusions that are possible about the nature of the crime of burglary, from the traces left by burglars in those instances reported to the police.

George A. Buck

Police Crime Analysis Unit Handbook,
California Crime Technological Research
Foundation, NCJI&SS, 1973

This document provides both background information and operational guidelines for police administrators interested in developing crime analysis units. The areas discussed are a definition of goals and objectives, crime data input, analysis of crime data, crime information disseminated as output, and feedback and evaluation. Discusses the type of system that should be used by various size police departments.

Anonymous

Opportunities for Improving Productivity
in Police Services, National Commission
on Productivity. 1973

The advisory group's report begins by briefly defining the concept of productivity as it might be applied to police services. The need to view police productivity in terms of a process integrally related to overall police management is emphasized. Some pitfalls of current measures used to judge police productivity are discussed. The productivity concept is related to three substantive areas; patrol, crime prevention, and human resources management,

Anonymous

Residential Security, Security Planning
Corporation, 1973

This report is an assessment of alternative approaches to crime prevention in residential settings, paying particular attention to the problem of burglary. This document provides a framework for evaluating security measures and identifies some of their policy implications for government. Its major premise is that the crime risk to a given residence is a function of crime pressures and vulnerability.

Michael Hindelang
Christophar Dunn
Alison Aumick

Sourcebook of Criminal Justice Statistics,
1973, Criminal Justice Research Center,
1973.

This document is a compilation of criminal justice and related statistics which are currently available from the publications of a variety of governmental agencies and private organizations.

Joseph L. Peterson

Utilization of Criminalistics Services By
the Police - An Analysis of the Physical
Evidence Recovery Process, National In-
stitute of Law Enforcement and Criminal
Justice. 1972

This document presents data describing the low frequency of laboratory involvement in criminal cases and details police investigative and evidence retrieval practices that can restrict the flow of available physical material to the criminalistics lab for analysis.

Anonymous

Urban Design, Security and Crime, Proceedings of a National Institute of Law Enforcement and Criminal Justice Seminar, April 12 and 13, 1972.

This seminar focused on security measures for preventing burglary and those stranger-to-stranger crimes that occur in and around residences and businesses in the urban community.

II. HYPOTHESIS

1) In any social grouping, the burglary rate varies directly with the degree of public susceptibility, 2) the degree of public susceptibility varies with the incidence of awareness, 3) therefore, the burglary rate varies with the incidence of awareness, 4) the incidence of burglary in the United States is higher than any other reported serious index crime, 5) the public awareness of burglary is low.

It is possible to reduce the rate of burglary by creating an awareness of the burglary potential in the mind of the public. If the public is aware of the potential for burglary, and their vulnerability, they will take corrective action to eliminate this potential in most cases.

Unfortunately this is not the case, we consistently observe divergent burglary rates from comparable communities. Such differences occur because of a variance in the susceptibility to the crime of burglary in those communities. A simple formula for this phenomenon is;

$$\frac{\text{Susceptibility to Burglary}}{\text{Number of structures}} = \text{Burglary Rate}$$

It is a postulate, in this hypothesis, that the degree of public susceptibility varies with the incidence of awareness. Where there is a low awareness of the potential for the crime of burglary, there will be a high rate of burglary. Where there is a high level of awareness of the potential for the crime of burglary there will be a lower rate of burglary.

Low Awareness = Greater Susceptibility

High Awareness = Lower Susceptibility

The burglary rate will vary from one community to another, depending upon the degree of awareness. We see islands of relative safety in areas which have high crime rates, this can be attributed to a high degree of public awareness. On the other hand we see areas with low crime rates experiencing a disproportional number of burglaries, this can be attributed to a low degree of public awareness.

		Awareness	
		High	Low
Susceptibility	High	Rate Low	Rate High
	Low	Rate Low	Rate High

High susceptibility and high awareness will have a low rate of burglary.
 High susceptibility and low awareness will have a high rate of burglary.
 Low susceptibility and high awareness will have a low rate of burglary.
 Low susceptibility and low awareness will have a high rate of burglary.

Burglary accounts for 40% of the total number of serious index crimes reported yearly in the Uniform Crime Report. As the percentage indicates, it, alone as a classification, accounts for more reported serious crime than any of the other six indexes reported. The average for the City of Chicago is similar to the National average.

$$\frac{\text{Number of Burglaries}}{\text{Total all Crimes}} = \text{Percent of Burglary}$$

We therefore hypothesize that because of the number of burglaries reported to the police, the awareness of the burglary potential is low.

Burglary > Awareness

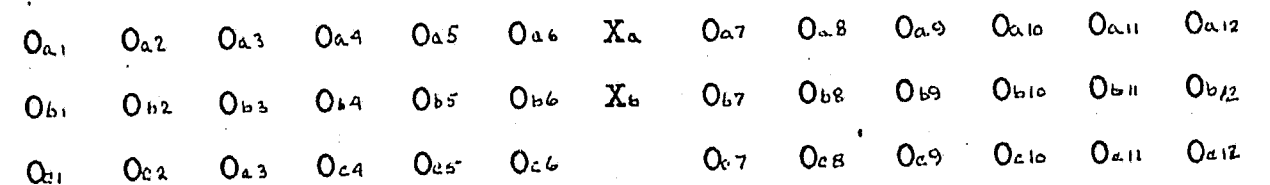
III. DESIGN

Given the objectives of this study, an attempt has been made to sort out factors of susceptibility and awareness. Susceptibility refers to the chances that a particular structure will be attacked. Awareness refers to the relative degree of difficulty in attacking a particular structure.

An important question is to what degree susceptibility influences awareness, and vice versa. Susceptibility and awareness can be inferred from archival data available in most police record systems. The experiment which best serves as a vehicle to project these findings is the "time-series" experiment. "The essence of the time-series design is the presence of a periodic measurement process on some group or individual and the introduction of an experimental change into this time series of measurements, the results of which are indicated by a discontinuity in the measurements recorded in the time series." ¹⁷ A modified form can be diagramed thus;



Such a design, as above, would not rule out extraneous variables affecting the validity of the design. By inclusion of two additional groups; one receiving a different treatment (Xb), and the other a control group with no treatment, gains of certainty of interpretation from the multiple measures plotted can be made. A single experiment may not subject the hypothesis to a true test of its validity. ¹⁸ The experiment design will be arranged thus;



III a. SUBJECTS

This experiment can be operationalized by the use of three of the Burglary Units, of the six unit Burglary Section, of the Chicago Police Department. One of the three selected units will be assigned to Group A, another Group B and the last to Group C. My personal choice for this experiment would be Area 4, Area 5, and Area 6. This choice is based on the fact that they are adjacent to each other, each receive a similar number of cases, and are otherwise analogous. (See Fig. 2)

b. PROCEDURES

At the start of the study each of the three selected Areas will be reviewed for the activity of previous six reporting periods. Each periods activity will be recorded independently of the other periods, Oct through Oct. The data to be gathered for measurement and comparison is as follows;

- Number of burglaries reported.
- Number of crime patterns developed.
- Number of crime patterns cleared.
- Number of arrests directly related to crime pattern analysis.
- Number of arrests not related to crime pattern analysis.
- Number of planning decisions changed as a result of crime analysis.
- Number of "stakeouts" as a result of crime pattern analysis.
- Number of field deployment adjustments as a result of crime pattern analysis information.
- Number of reports of security consultations with contractors and re-builders engaged in activity within the area.
- Number of contacts of "potential" victims by the police.
- Number of Community Workshops, Business Groups, and other meetings attended by the police where crime analysis information was disseminated.
- Number of publications of "pattern data" in local community newspapers.

Area "A" will undergo a transition from the current manual means of recording crime analysis data to a fully automated, computerized, crime analysis system. Supervisors will stress the utilization of this information.

	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6
Cases Received 1st. Period 1975	380	1358	567	900	953	919.
Number of Districts	3	4	3	4	4	3
Population	255,594	692,513	555,539	510,939	750,232	602,140
Area Size Square Miles	12.70	68.09	42.80	23.39	58.65	21.59

Population figures based on preliminary 1970 census tract counts.

Population and Land Areas - By Area of the Chicago Police Department

Figure 2

Area "B" will retain the present manual system of recording crime analysis information. Special emphasis will be placed upon utilization of crime analysis data, this emphasis will be stressed to offset the increased emphasis resulting from the new procedures in Area "A".

Area "C" will retain the present manual system of recording crime analysis information. This area will not be exposed to pressures to use crime analysis data. It is expected that there will be a slight improvement in activity as a "rub-off" from the other two areas.

After twelve periods of observation are made and recorded for each test group comparisons can be made.

c. MEASURES

The following will serve as measures;

- Number of Burglaries reported
- Number of Crime patterns developed
- Number of Crime patterns cleared
- Number of arrests related to crime patterns
- Number of arrests not related to crime patterns
- Number of planning decisions changed as a result of crime analysis
- Number of "stakeouts" as a result of crime analysis
- Number of field deployment adjustments as a result of crime analysis
- Number of reports of security consultations with contractors
- Number of contacts of "potential" victims by the police
- Number of Community Workshops, Business Groups, and other meetings attended by the police where crime analysis information was given out
- Number of publications of "pattern" data in local newspapers.

Each Area will submit reports containing the above information for each of the twelve periods of observation, six pre-test and six post-test. Each period of observation will be a standard twenty-eight day police period.

The Crime Analysis Unit will recapitulate the data by task performed and Areas for each period. For example in the O₁ period, which includes a, b, and c, for the first task listed - Burglaries reported- using the data from figure 2.

Measure	Period O ₁			Total	Mean	Standard Deviation
	Area A	Area B	Area C			
Burglaries Reported	900	953	919	2772	924	21.90

The second task or measure will be listed under the first, and so forth. The designation on top of the table indicates that this is table O₁, which means that the activity of all of the O-one observations are in the table. Area A is the "a" observation, Area b is the "b" observation and Area C is the "c" observation. This reduces the complexity of the table.

At the conclusion of the twelve periods of observation correlations will be made with the pre-test and post-test totals for each measure and each group. Due to the fact that there are twelve measures and three groups, thirty-six correlations will be required. The sum totals of all the pre-test scores for each group will be tested against all of the sum totals of the post-test scores for correlation by use of Pearsons r.

In addition to this, due to the fact that the design is a time series, correlation coefficients can be obtained from any of the various times by simply considering the pairs of values for XY corresponding to the desired time. Thus the final observations will be the sum total of each group correlated against the sum

Since the obtained value of "t", 2.09, does not fall in the predetermined zone of rejection, the data does not lead us to reject the null hypothesis. We conclude that our findings do not cast doubt on the hypothesis of no difference. 2.09 is significant to fail to accept the null hypothesis which would be accepted at 2.23 for $P > .05$, two tailed test.

IV.

RESULTS

The results of this project should have a substantial effect on the number of burglaries reported to the police. There should be a considerable decrease in their number, due to increased public awareness and greater police productivity toward combatting the burglary problem.

The test results will show the need for a fully automated Burglary Crime Analysis System to be used city wide.

The test will also show the usefulness of modern crime analysis, as an essential investigative aid, in planning manpower allocations and as an essential element of community relations programs.

V. DISCUSSION

This is the type of research we, in the police service, must devote more time and effort too. Whether this project is accepted or rejected by peers or superiors is of little significance overall. What is important, is that we in the police service strive to improve "the state of our art". We have resources which any behaviorist would give his eye teeth for a quick glimpse at. Yet, we fail to use them. All too often police planning and research is devoted to the Saint Patrick's Day Parade, types and specifications of uniforms, or color of squad cars. These are operational problems, not true research problems. "Elements of methodical police work must issue mainly from police practice and police experience, needless invented desiderata by outsiders will not reflect the 'state of the art', because it is not from the art, and very frequently has little bearing on the actual 'practices of the art' in substantive terms knowledge and technical skill must be developed..."¹⁹ and it must be developed by "us" who know the problems and have thoughts on how to solve them.

In the instant case of this study one has to wonder why it has'nt been done before. The present system of crime analysis in the Chicago Police Department was developed in 1961, that's four-teen years ago, and today it still remains the same. I am sure the same problem exists in a majority of large police departments. It can't be because they are too near the fire to see the smoke, they are in the fire and can't see a way out.²⁰

This project has touched upon the area of Community Relations, but what are Community Relations? Are they the relationships between Officer Friendlies and their ball teams, or they the relationships

between 10,000 policemen, crime, and the community. While I appreciate the need for good community relations between the citizens and their police department, I feel that some of our community relations programs could be better served by other municipal agencies. I feel that the Park District should teach kids how to swim and play baseball. I feel that the Building Department or Department of Streets and Sanitation are better qualified to inspect buildings and alleys. I feel that a police departments community relations efforts should be directed toward the prevention of crime.²¹

This project suggests that the public must be informed of their vulnerability to the crime of burglary and measures to counteract that vulnerability. This to me, would be an ideal form of a community relation program. A recent NCJI&SS publication discussed "the trade off" to prevent crime. It called for building security audits and programs to capitalize on untapped pools of resources, the community residents, to establish a more potent mix of joint Police-Community efforts to outwit the would be criminal by reducing his opportunity and instill in his mind a high degree of uncertainty and a fear of identification and arrest.²² Crime prevention programs should use such data, as would be generated by this project, in the design of those programs. Our present programs are "generalized", the future should be "crime specific".²³

The most recent National Crime Commission stated that "every police agency should seek the enactment of local ordinances that establish minimum security standards for all new construction and existant structures".²⁴ This project is in total agreement with those findings. All municipalities maintain certain building per-

mit requirements. When a person receives a permit for new construction or remodeling his name should be forwarded to a Preventive Programs Officer. This Officer should then meet with the person and discuss the types of security which would be best suited for his needs.²⁵

I have left the most crucial aspect of this discussion until last, the utility of a modern automated crime analysis system to a police agency as an investigative aid. In recent years the Courts have established guidelines as to how and when we can question an offender, where and when we can conduct a search, and what we can use as evidence. At the same time crime rates have spiraled up, and not as a result of the Court decisions as some would like us to believe. Crime rates have jumped from our own, the police, inability to deal with crime. We are dealing with crime by use of methods and means which were outdated ten, twenty, and thirty years ago. Our Method of Operation file systems were developed in England in 1901.²⁶ Have they endured because of their excellence? I think not, they endured because they were the only way to do it, or the only way that was known and accepted.

The biggest trouble, outside of being obsolete, with the M.O. files, is that they are not available for use by the field forces. Try to find a Crime Pattern behind a district desk, you may find half of one near the phone as the back makes very good scratch paper. Try to get into a "Review Office" on any watch but days, five days a week. Even if you do get in you are apt to hear a cry, "don't mess up my files". They have to be stored nice and neat in perfect echelon for the full scheduled retention period, in case of an inspection, after which they will be destroyed.

But all is not lost, yet, each station and area has a new computer terminal which prints out data and even has a viewing screen. This device could be used to print out current crime analysis data for use by field forces.

It could be used to compare methods of operation of arrested persons with unsolved crimes of a similar nature. It could open the door for further investigation by establishing investigative direction. The data could also establish if there is physical evidence or if there are witnesses who could identify an offender. In many cases such data may aid in the establishment of a substantial case against an offender. In others it may develop enough of a similarity of operation to allow the clearance of an otherwise unsolvable crime.

Computerization is not going to actually prevent crimes or solve them, but it is a modern way to approach the problem of preventing and solving crimes.

VI.

DIRECTION FOR FUTURE RESEARCH

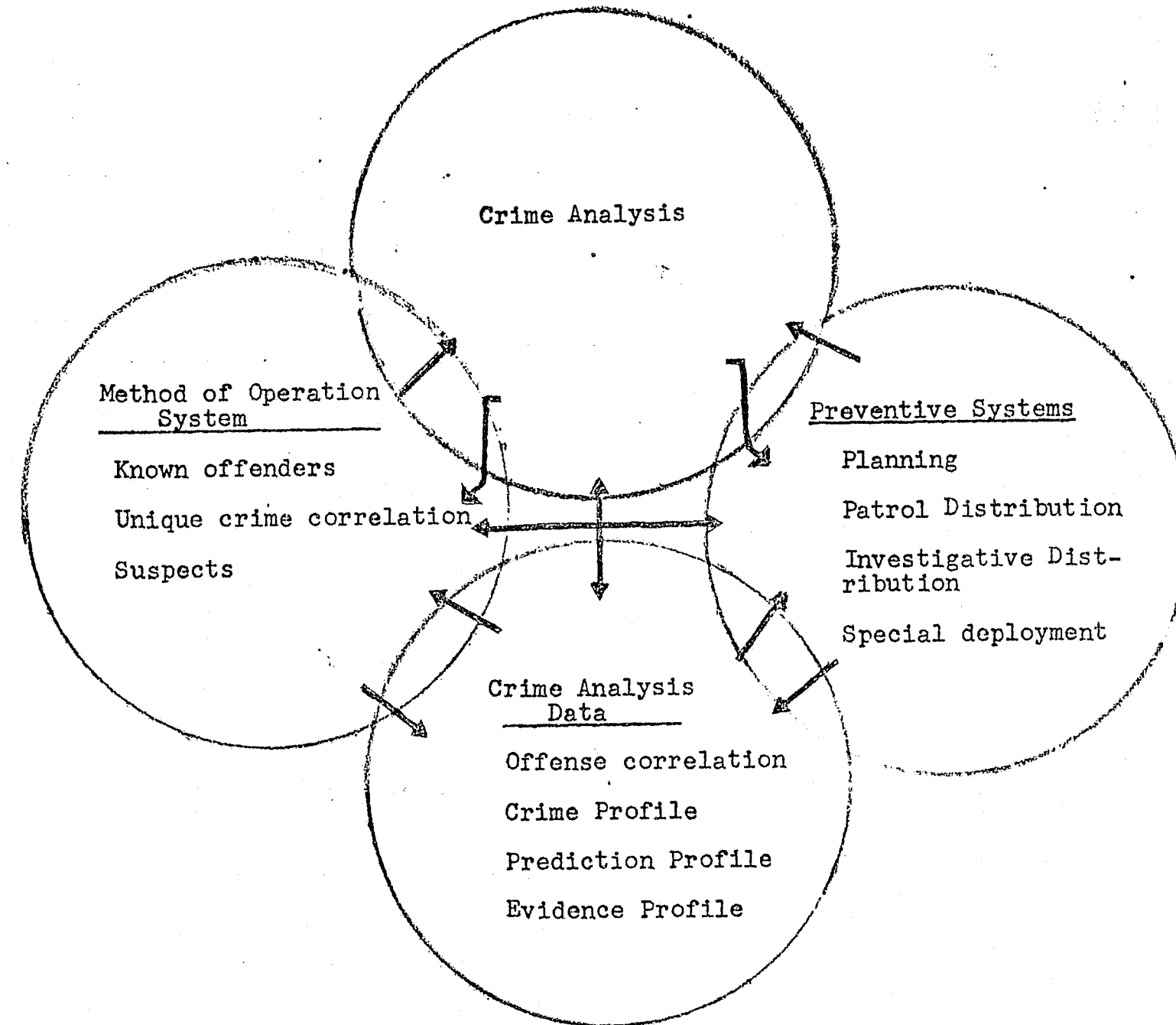
Future research should be directed toward the inclusion of other crimes into the automated crime analysis system. The other crimes include, but are not limited to;

Auto Theft
 Robbery
 Rape
 Certain types of Theft
 Certain types of Criminal Damage to Property

In the not to distant future, research should be directed toward the establishment of a total crime analysis system. Our "Art", at the present time, uses the terms Crime Analysis and Method of Operation as synonymous. This paper reflects the same fault, some times they are referred to as one and other times as the alternate, this is as it is done daily by practitioners in the police service.

A Crime Analysis System, to be a true system, must be all encompassing and not limited to data on reported crimes and the manner in which they occurred. An effective crime analysis system will analyze the total crime picture so that effective approaches can be made to deal with crime. I suggest that Crime Analysis Systems should have a correlation of essential sub-systems, which together will record, correlate, and predict crime trends, and provide data for the development of preventive programs.

Data flow in Crime Analysis System



FOOTNOTES

1. Prior to 1974 only Thefts of over \$50.00 were considered to be index crimes. In 1974 the classification was changed to include all thefts. While the number of Thefts for 1974 is expected to exceed the number of Burglaries, this crime is still not considered a serious crime by police agencies. Other more serious crime is frequently reclassified to the less serious sounding crime of Theft.
2. Charles E. O'Hara Fundamentals of Criminal Investigation
Charles C. Thomas Co. Springfield Ill.
2nd. Edition 1970. p 597
3. Chicago Police Department, Burglary Section - Criminal Investigation Division Annual Report 1973.

Uniform Crime Reports - 1971 , Data extracted from State Totals
4. Nicholas Katzenbach The Challenge of Crime in a Free Society
Chairman
A report of the President's Commission
on Law Enforcement and Administration
of Justice. U.S. Gov't. Printing Office
Washington D.C. 1967. p 118
5. George A. Buck Police Crime Analysis Unit Handbook,
California Crime Technological Research
Foundation, NCJI&SS, 1973. p VIII
6. George A. Buck Ibid.
7. Charles E. O'Hara Ibid. p 597
8. Charles E. O'Hara Ibid. p 597
9. Anonymous Residential Security, Security Planning
Corporation. NCJI&SS, 1973. p X
10. Robert F. Kennedy Speech delivered at the Columbia University
Law School Forum. New York City, Jun. 19,
1967. Journal of Criminal Law, Criminology
and Police Science, 2-142 1967
- Katzenbach Ibid. p 50
11. Katzenbach Ibid. p 57
12. Anonymous Crime Against Small Business, Small Bus-
iness Administration, Senate Document 91-14
U.S. Gov't Printing Office, Washington D.C.
1967. p 1
13. Anonymous Criminal Victimization In the United States
January - June 1973, National Crime Panel
Survey Report, V I, 1974

14. Anonymous A Call For Citizen Action: Crime Prevention
and the Citizen, National Advisory Commission
on Criminal Justice Standards and Goals. 1974
p 4.
15. Over the last several years I have observed an increased demand for foot patrols by police. The demands have come from citizen groups who are concerned with the crime in their communities. There is a misconception on the value of foot patrols by the public as such. People seem to remember years back when they saw a policeman walking down the street engaging it what they thought was patrol. There is a good chance the officer was going from one "hole" to another. If they saw two policeman a month they were doing good. The police never did walk the side streets unless they were taking a short cut.
16. Anonymous A Call For Citizen Action, Op. Cit. p 4
17. Donald T. Campbell Experimental and Quasi-Experimental Designs
Julian C. Stanley For Research, Rand McNally and Co. Chicago,
1963, p 37.
18. Eugene J. Webb Unobtrusive Measures, Rand McNally and Co.
Donald T. Campbell Chicago Ill. 1966, p 174.
Richard Schwartz "There must be a series of linked critical.
Lee Sechrest experiments, each testing a different outcrop-
ping of the hypothesis."
19. Egon Bittner The Functions of the Police in Modern Society,
Center for Studies of Crime and Delinquency,
Rockville, Maryland, 1970, p88.

William Westley "Secrecy and the Police", Social Forces, Vol
31, March 1965, pp 254-255.

Westley and Bittner both point out that even if
given access to the police procedures as practiced, all that will
be told is what is right. Secrecy is still prevalent in the police
culture.
20. Victor A. Thompson "Bureaucracy and Innovation", Administrative
Science Quarterly, Vol. 16, #1, June 1965, pp 1-20

!.police bureaucracy has shown little capacity
for radical innovations, for significant changes, for generation
of, acceptance of. and implementation of new policies, and proced-
ures, methods and devices, which differ from traditional ap-
proaches.
21. Norval Morris "The Overreach of Criminal Law", Midway, Winter
Gordon Hawkins 1969, Vol. 9, NO.3.

The Honest Politician's Guide to Crime Control,
University of Chicago Press, Chicago 1970, p 30

These articles give examples of the activities police are involved in throughout the community. The authors feel that some of the activities that the police perform should be performed by other institutions.

22. Anonymous Opportunities for Improving Productivity in Police Services, National Commission on Productivity, 1973, p 37
23. Anonymous Opportunities.ect Ibid. p 44.
24. Anonymous National Conferance on Criminal Justice Standards and Goals, Working Papers, U.S. Gov't. Printing Office, Washington, D.C. p 143.
25. Richard J Healy Industrial Security Management, American Timothy J Walsh Management Assn. New York, N.Y. 1971 p 17.

Basis for assessing vulnerability.

<u>Risk Potential</u>	<u>Criticality Assessment</u>
1. Virtually Certain	A. Fatal to Business
2. Highly Probable	B. Very Serious
3. Moderately Probable	C. Moderately Serious
4. Improbable	D. Relatively Unimportant
5. Probability Unknown	E. Seriousness Unknown

26. Anonymous Crime Analysis Handbook. Ibid. p 3

END