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CRIMINAL INVESTIGATION:

A Selective Literature Review & Bibliography

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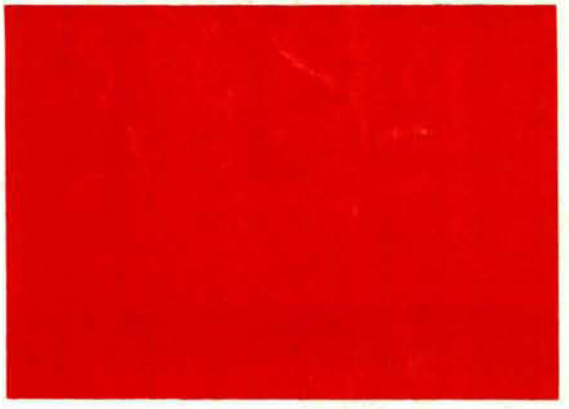
Rhonda Moore



Research Division Division de la recherche

CRIMINAL INVESTIGATION:

A SELECTIVE LITERATURE REVIEW

AND BIBLIOGRAPHY

by

Duncan Chappell
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1982

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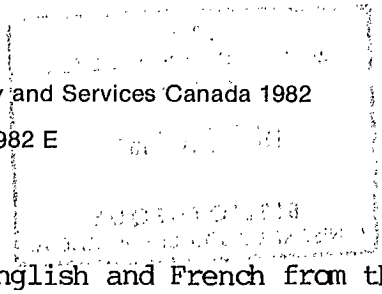

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ABSTRACT

This selective literature review reports the findings and implications of recent English-language research into the criminal investigation function, and includes some suggestions for future Canadian research, based on research findings in other countries.

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CHAPTER I

THE LITERATURE OF INVESTIGATION: A BRIEF HISTORICAL PERSPECTIVE

> The detective business is the higher brand of police business. A man may be an excellent policeman, and yet be an utter failure as a detective; and I have seen many a clever detective who was out of his element in the simpler lines of police duty ...
>
> A good detective must be quick to think, keen to analyze, persistent, resourceful, and courageous. But, the best detective in the world is a human being, neither half-devil nor half-god, but just a man with the attributes or associates that make him successful in his job (quoted in Campbell, 1970:20-21).

This view of the "detective business" was offered more than a century ago by John Wilson Murray. For more than thirty years, Murray occupied the position of "Detective for the Government of Ontario," establishing a formidable reputation throughout Canada, the United States and abroad for "shrewdness, cool, and his iron determination not only to capture the criminal he pursued, but to prepare an airtight case for his conviction" (Campbell, 1970:4).

The elite, specialized and frequently dramatized view of detectives, epitomized by Murray's career, has remained an integral part of the police image in most western nations, including Canada. It is a view, however, which has recently been subjected to scrutiny and challenge. Research conducted in the United States has raised serious questions about the ability of detectives either to "capture the criminal" or to "prepare an airtight case for his conviction." Detectives seem to have fallen from their pre-eminent position in policing, suddenly and unexpectedly becoming a beleaguered, if not endangered, species.

This selective review of the contemporary criminal investigation literature describes the research findings which have led to this state of affairs, and some of the implications of these findings for police policy-makers and administrators.

In 1971, the author of one of the first substantial studies of criminal investigation remarked upon the dearth of scholarly published material available on the subject (Ward, 1971). This comment is no longer valid. During the past decade, a substantial body of writing, much of it generated by research, examined many aspects of the criminal investigation process (Simpson, 1976).

Much of the literature produced by earlier writers can be labelled "non-scholarly," often being no more than descriptions of cases solved by famous detectives. However, several works stand out. The development of scientific criminal investigation is described in the writings of Sir Francis Galton (1892, 1908), a pioneer in the use of fingerprints to identify criminals. Hans Gross's Criminal Investigation (1906) remains a classic (Weston and Wells, 1974). Raymond B. Fosdick, in his influential American Police Systems (1920), made a detailed and critical survey of the organization of detective units and the question of whether they should be centralized or decentralized (Simpson, 1976).

Official government enquiries also were useful in developing an understanding of the role of detectives. In the United Kingdom, the Departmental Committee on Detective Work and Procedure recommended specialized training for detectives. In one of the first public discussions concerning caseloads for detectives, the Committee remarked that

> we have naturally considered whether any guidance regarding the proper detective stength for a force can be obtained by reference to the statistics of local crime, on the principle that, taking one branch of detective work with another, it might be possible to determine the strength of the CID personnel required to deal with any given number of recorded crimes, but we have come to the conclusion that, having regard to the variety of local conditions, it is not possible to arrive at any certain conclusions from these figures. The only safe course, in our view, is to take careful account of the personnel, organization and equipment of each force in relation to the actual work which should be attended to by the detective staff, and to adjust former to the latter so that the various branches of the work can be accomplished effectively and without overstrain. In this connection it will be necessary also to take account of the strength of the uniform branch, particularly in the county forces (Report of the Departmental Committee on Detective Work and Procedures, 1939:98).

One of the earliest and most comprehensive studies of police manpower and the workload of detectives, also was conducted in the United Kingdom (Cordner, 1979). In the mid-1960s, Martin and Wilson, using activity reports, obtained information from about 10% of all police officers in England and Wales (about 7,000) concerning their work over a two-month period (Martin and Wilson, 1969). They found that the duties

accounting for the most police time were patrolling (31%) general duties (20%), and crime investigation (18%). Detectives performed nearly 60% of crime investigation work, but there was variation among police forces. Urban detectives virtually monopolized criminal investigations, while their counterparts in rural areas divided this work evenly with patrol officers. The time devoted to each investigation ranged from 7.1 to 24.4 hours, depending upon the nature of the jurisdiction. Detectives in metropolitan London worked an average of 58.5 hours for each arrest they achieved while those in other forces worked an average of 46.3 hours.

This earlier literature accepted, almost without question, the assumption that detective units were a necessary and effective means of handling criminal investigation. The literature also reinforced the "detective mystique" that a detective has unusual qualifications and skills; that investigating crime is a real science; that a detective does much more important work than other police officers; that all detective work is exciting; and that a good detective can solve any crime (Goldstein, 1977:55).

It was not until well over a century of experience with detective units that this mystique began to be seriously challenged. Heretics pointed out that

> much of what detectives do consists of very routine and rather elementary chores, including much paper processing; that a good deal of their work is not exciting, it is downright boring; that the situations they confront are often less challenging and less demanding than those handled by patrolling police officers; that it is arguable whether special skills and knowledge are required for detective work; that a considerable amount of detective work is actually undertaken on a hit or miss basis; and that the capacity of detectives to solve crimes is greatly exaggerated (Goldstein, 1977:55).

CHAPTER II

THE FIRST OF THE HERETICS

An authoritative historical account has yet to be written about the "lifting of the veil" obscuring the realities of detective work. In North America, however, the first official challenge to the detective mystique seems to have emerged from the work of the Presidential Commission on Law Enforcement and the Administration of Justice during the 1960s (Commission Report: The Challenge of Crime in a Free Society, 1967; Greenwood et al., 1975:3). The Commission made a study of the criminal investigation process, reaching the conclusion that it was neither as effective nor efficient as had been previously assumed. The Commission was, for example, critical of the deployment principles applying to central detective bureaus:

> Several cities, both large and small, routinely deploy detectives in twos and sometimes threes! Since the bulk of a department's investigative work is routine, the widespread use of investigative teams is an unnecessary waste of manpower (Task Force Report: Police, 1967:55).

The Commission noted that in most departments detectives rather than patrol officers followed up crime investigations, and because there were relatively few detectives (usually about 10 per cent of total departmental strength) they were overwhelmed by their caseloads. To remedy this situation, and to attract better personnel into police work, the Commission made a controversial proposal that departments establish three classes of officers: police agents, police officers and community service officers.

Police agents

> would replace, but have a much wider responsibility than, the existing detective. In most departments, the detective is limited to an investigative function. Many tasks currently performed by detectives, such as routine follow-up investigations on certain classes of crime could be assigned to police officers, and in some cases, to community services officers (Task Force Report: Police, 1967:22).

The Commission recommendations were supported by Isaacs (Task Force Report: Science and Technology, 1967). In perhaps the first reported study to examine crime investigation as a managerial problem (Simpson, 1976), Isaacs analyzed the factors affecting the clearance of crimes by the Los Angeles Police Department. For one month during 1966 he examined reported crimes in two sections of the city, from the point at which they were observed or reported to their clearance. Of his sample of 1,905 offences, 25% were cleared, mostly by the naming of a suspect or as a result of an on-scene arrest. Isaacs found that the overwhelming proportion of the arrests were made by patrol officers and that detectives were primarily employed in follow-up investigations. He also discovered that detectives were most likely to select for follow-up those cases which had the greatest potential for clearance--usually cases which included a named suspect in the preliminary investigation report completed by a patrol officer.

Crimes of burglary and theft, Isaacs found, were particularly difficult to solve through follow-up investigation. Of the burglary and theft offences that were cleared, most were cleared by patrol arrests at

the crime scene. Despite this fact, the Los Angeles Police Department gave high priority in the allocation of detective manpower to follow-up investigations of these crimes. Isaacs, who was critical of this policy, suggested that greater emphasis should be given to investigations of burglary and theft by members of the patrol force. Isaacs' study demonstrated "patterns of detective behaviour which were hitherto only suspected" (Simpson, 1976:57). The study did not, however, receive widespread attention at the time.

Another overlooked study, conducted by Westley in 1951 in a mid-western U.S. police department, also provided valuable insights into detective behaviour. Westley's study, originally submitted as a Ph.D. dissertation to the University of Chicago, was not published until 1970 (Westley, 1970). Although concerned only tangentially with detectives, Westley observed that the assignment of cases was based upon supervisors' personal preferences which had little to do with any special skills or training possessed by investigators. Westley described detectives as being strongly motivated by the desire for prestige, which promoted feelings of jealousy and competition in detective units and militated against the exchange of information and co-operation among officers. Antagonism also existed between detectives and uniformed officers, the latter viewing detective work as a more rewarding and prestigious occupation. Particular resentment was felt by uniformed officers about the lack of credit they received from detectives for arrests they made while on patrol. Westley remarked that this resentment interfered with the administration of the police department.

Westley's sociological study of police seems to have been the first of its type conducted in North America (Simpson,1976). During the following decades, a number of similar studies provided more information about the behaviour of detectives, and their interaction with fellow police officers and the public (Banton, 1964; Skolnick, 1966; Niederhoffer, 1969; Wilson, 1968; Laurie, 1970; Riess, 1971; Sanders, 1976; Wilson, 1978). Reiss (1971), for example, observed police patrol operations for almost a decade in Chicago, Boston and Washington, D.C. He found that the nature of policing was essentially reactive, with the police functioning in response to citizens' complaints and information received. He too observed that the great majority of felony arrests were made by patrol officers, rather than by detectives or other specialized units, and that the arrests were made on the basis of information given to police by citizens. Reiss commented that

> police departments ideally organize detective divisions to solve those crimes that require intensive investigation. Yet, we maintain that most of the knowledge that contributes to solution through investigation is based on citizen information on the identity of the suspects. Detective investigation more often depends upon locating a known offender than in following leads to deduce the identity of an offender ...
>
> The media view of the detective, epitomized by Sherlock Holmes, James Bond, or Joe Friday, hardly squares with the reality of most detective work that leads to an arrest. This is not to say that detectives don't follow the ideal model, investigating many crimes that do not lead to arrest, but rather, their role in producing arrests is far more restricted than the ideal model implies (Reiss, 1971:108-109).

It has been said of studies like those of Reiss et al. that:

> [They] are case studies which use observations, personal interviews, and general descriptions. These process and phenomenological studies have made valuable contributions to our understanding of the social processes involved in detective work. While all the studies mentioned offer important insights ... the relatively little emphasis on outcomes and quantifiable measures in these studies limits their operational significance (Kelling, 1979:7).

In the 1970s, social scientists from a variety of disciplinary backgrounds began in earnest to focus critical attention upon the criminal investigation process from a viewpoint which was of operational significance and which placed an emphasis on "outcomes and quantifiable measures." Studies of this type are described in the succeeding sections of this review.

CHAPTER III

RAND: THE PRINCIPAL HERETIC

In 1975, the RAND Corporation published a three volume report on the criminal investigation process in the United States (Greenwood et al., 1975). This study, except perhaps for the Police Foundation Kansas City Patrol Experiment (Kelling et al., 1974), has provoked more comment, controversy and debate about police matters than any other single research project.

The RAND study was designed to achieve four principal objectives:

- To describe, on a national scale, current investigative organization and practices
- To assess the contribution that police investigation makes to the achievement of criminal justice goals
- To ascertain the effectiveness of new technology and systems being adopted to enhance investigative performance
- To reveal how investigative effectiveness is related to differences in organizational form, staffing, procedures, etc. (Greenwood et al., 1975:3:v).

The scope of the RAND study was limited to the police investigation of serious felonies such as homicide, rape, assault, robbery, burglary and theft. The research team was advised and assisted by a panel of distinguished police personnel. Information for the study was drawn from the responses to a questionnaire distributed to approximately 300 U.S. police departments that had 150 or more employees, or which served

jurisdictions with populations exceeding 100,000 persons. One hundred and fifty-three departments responded to the questionnaire. Based on these responses, 25 departments were selected for more detailed study, using a variety of techniques including interviews and the observation of Twelve principal findings emerged from the study:

(1) Differences in investigative training, staffing, workload, and procedures appear to have no appreciable effect on crime, arrest, or clearance rates.

(2) The method by which police investigators are organized (i.e., team policing, specialists vs. generalists, patrolmen - investigators) cannot be related to variations in crime, arrest and clearance rates.

(3) Substantially more than half of all serious reported crimes receive no more than superficial attention from investigators.

(4) An investigator's time is largely consumed in reviewing reports, documenting files, and attempting to locate and interview victims on cases that experience shows will not be solved. For cases that are solved (i.e., a suspect is identified), an investigator spends more time in post-clearance processing than he does in identifying the perpetrator.

(5) The single most important determinant of whether or not a case will be solved is the information the victim supplies to the immediately responding patrol officer. If information that uniquely identifies the perpetrator is not presented at the time the crime is reported, the perpetrator, by and large, will not be subsequently identified.

(6) Of those cases that are ultimately cleared but in which the perpetrator is not identifiable at the time of the initial police incident report, almost all are cleared as a result of routine police procedures.

(7) Most police departments collect more physical evidence that can be productively processed. Our analysis shows that allocating more resources to increasing the processing capabilities of the department can lead to more identifications than some other investigative actions.

(8) Latent fingerprints rarely provide the only basis for identifying a suspect.

(9) In relatively few departments do investigators consistently and thoroughly document the key evidentiary facts that reasonably ensure that the prosecutor can obtain a conviction on the most serious applicable charges.

(10) Police failure to document a case investigation thoroughly may have contributed to a higher case dismissal rate and a weakening of the prosecutor's plea-bargaining position.

(11) Crime victims in general strongly desire to be notified officially as to whether or not the police have "solved" their case, and what progress has been made towards convicting the suspect after his arrest.

(12) Investigative strike forces have a significant potential to increase arrest rates for a few difficult target offences, providing they remain concentrated on activities for which they are uniquely qualified; in practice, however, they are frequently diverted elsewhere (Greenwood et al., 1975:1:vi-ix).

Based upon these findings, the RAND study authors asserted that

> the effectiveness of criminal investigation would not be unduly lessened if approximately half of the investigative effort were eliminated or shifted to more productive cases. The remaining investigative force should suffice to handle routine cases, which give rise to most of the clearances which now occur, and to perform the post arrest processing involved in a patrol arrest (Greenwood et al., 1975:1:x).

The RAND study proposed nine specific reforms:

- Reduction of follow-up investigations on all cases except those involving the most serious crimes
- Assignments of generalist investigators, who would handle obvious leads in routine cases, to local operations commanders
- Establishment of a major offenders unit to investigate serious crimes
- Assignment of serious offence investigations to closely supervised teams, rather than to individual investigators
- Strengthening of evidence processing capabilities
- Increasing the use of information processing systems in lieu of investigators
- Selective and judicious use of strike forces
- Placement of post-arrest investigations under the authority of prosecutors
- Initiation of programs designed to impress on the citizen the crucial role he or she played in crime solution

The RAND study, the most comprehensive report yet published on criminal investigation, is essential reading for anyone interested in this aspect of police work. It provoked an immediate and hostile reaction from some police administrators. The International Association of Chiefs of Police, in their journal Police Chief, printed a lengthy point-by-point rebuttal by Gates and Knowles (1976). While agreeing that there was "a definite need for improvement in the criminal investigation process," Gates and Knowles claimed that the RAND study relied too heavily on information from only a few departments and drew conclusions that were not

supported by the data. In particular, said Gates and Knowles,

> it would seem the RAND Corporation's conclusion that half of the investigative effort could be eliminated without lessening the effectiveness of criminal investigation cannot be seriously considered as anything other than the unsubstantiated opinions of researchers who lack the insight and understanding of the police investigation function necessary to draw such a conclusion (Gates and Knowles, 1976:2).

The RAND researchers, in a subsequent issue of the Police Chief (Greenwood et al., 1976), referred to the original report in which they acknowledged the limitations of the data they had used:

> It is the nature of social science research ... that one must analyze and draw the best possible inferences from data with such shortcomings. When ... such similar results emerge from several departments located in different parts of the country and having different organizations and procedures, they take on greater generality of interpretation (Greenwood et al., 1976).

The detailed debate about the research design used, and the criticisms of that design, as well as other aspects of the dialogue between RAND and Gates and Knowles, has been reproduced in a single volume for those who wish to pursue the matter further (National Institute of Law Enforcement and Criminal Justice, 1977). Here it is sufficient to note that the controversy over the RAND findings continues, and many critics question the findings and recommendations. Nonetheless, the publication of the RAND study performed the important job of forcing the debate into the open (Anderson, 1978: 8).

It seems certain that, prior to the RAND study, doubts about the efficiency and effectiveness of investigative bureaus existed among police officers of various ranks and experience. Earlier research evidence supported many of the RAND findings, as the RAND researchers acknowledged (Greenwood et al., 1975:3:41-45). For instance, Greenwood (1970), Ward (1971) and Greenberg et al. (1972) showed that clearance statistics were generally unreliable; Isaacs (1967), Greenwood (1970) and Feeney et al. (1973) found that relatively few robberies and burglaries resulted in arrests, and that most arrests were made by patrol officers; Greenwood (1970) and Greenberg et al. (1972) showed that the amount of investigative effort did not seem to affect the probability of solving robberies or burglaries; and Isaacs (1967), Folk (1971), Ward (1971), Parker and Peterson (1972), Feeney et al. (1973), and others showed that investigators made very limited use of indirect evidence (such as fingerprints found at the scene of crimes).

Prompted by these and other research findings, a number of police administrators had already begun to experiment with new approaches to criminal investigation practices and procedures. Before the release of the RAND study, police departments in Rochester, New York (Bloch and Weidman, 1975; Bloch and Bell, 1976), and Multnomah County in Oregon (Brand and Korloff, 1976) had begun to construct formal case screening methods for the assignment of investigations. A screening method had been constructed in 1972 by the Stanford Research Institute (SRI) for use in burglary investigations (Greenberg et al., 1972). With the aid of computer-calculated mathematical wieghts for different items of information (solvability factors), the SRI burglary model (Table 1, p.19)

identified those burglaries most likely to result in an arrest. The SRI developed a similar screening device for robberies (Greenberg et al., 1975) displayed in Table 2 (p.20).

Although most police departments used informal screening devices similar to the SRI models, the development of formal mechanisms permitted more rapid and reliable case screening by police managers. In a subsequent testing of the SRI burglary screening model in 26 police departments (Eck, 1979) by the Police Executive Research Forum (PERF), the model produced accurate predictions in 85% of the 12,001 cases examined. This finding prompted the conclusion that

> it is the characteristics of burglary cases, not follow-up investigations, that determines the overall success or failure rate of burglary investigations. This finding means also that police management can use the screening device to select from the flood of burglary reports they receive those cases that have the best chance of being solved. A screening model provides police managers with a tested tool with which they can direct their investigators to be more productive or, put another way, less wasteful of increasingly scarce police resources. Managers thus have a device by which they can control assignment of burglary investigations and impose a degree of order in an area - police investigations - where attempts at management traditionally have been the exception rather than the rule (Eck, 1979:3-4).

Apart from screening devices, police departments were experimenting with alternative methods of deploying investigative personnel. In Rochester, New York, the police department decentralized the detective bureau into teams assigned to geographical areas (Bloch and Ulbert, 1974; Bloch and Bell, 1976). A team consisted of about 30 patrol officers, four to seven detectives, a patrol lieutenant and patrol sergeants. An

evaluation of the Rochester experiment found that

- teams made arrests in a larger percentage of cases initially classified as burglary, robbery, and larceny than did non-team personnel;
- teams cleared a larger percentage of burglaries, robberies, and larcenies than did non-team personnel;
- teams made arrests at the scene of a crime in a larger percentage of their cases than did non-team personnel;
- arrests made by teams for burglary, robbery and larceny, were less likely to result in prosecutions than were arrests by non-team personnel;
- preliminary investigation reports of burglary, robbery, and larceny by patrol officers of the teams contained no more information than preliminary investigations reports completed by non-team members;
- follow-up investigations of burglary and robbery by teams resulted in a larger percentage of arrests than follow-up investigations by non-team police;
- prosecution stemming from follow-up arrests by teams for burglary, robbery, and larceny were similar in percentage terms to prosecutions stemming for follow-up arrests by non-teams;
- team patrol officers reported a much higher degree of co-operation with team investigative personnel than non-team investigative personnel (Bloch and Bell, 1976:8.11).

The evaluation concluded that

> a police department can improve its arrest and clearance rates by assigning detectives to work as part of police teams. But this evaluation also points out that police departments that do adopt the Rochester System, either on an experimental or permanent basis, must assess their own experience carefully ... .

> Departments that decide to adopt an arrangement similar to Rochester's will need to provide appropriate support for the managerial innovations that may be proposed by team commanders. They must also be continuously alert to team problems, particularly those of the individual commanders, whose performance will play a large part in determining whether teams are successful (Bloch and Bell, 1976:11-12).

This conclusion, it should be noted, ran somewhat counter to one of the RAND principal findings that the method by which the police organize their investigative personnel makes no difference to the outcome of criminal investigations. The results of the Rochester experiment offer a more optimistic appraisal of the effect that modern management techniques may have upon the outcome of criminal investigations. This has prompted further experimentation with the management and organization of criminal investigations, as well as renewed challenges to the RAND findings.

TABLE 1

STANFORD RESEARCH INSTITUTE
BURGLARY INVESTIGATION SCREENING MODEL

INFORMATION ELEMENT	WEIGHTING FACTOR
Estimated Time Lapse:	
Less than 1 hour	5
1 - 12 hours	1
12 - 24 hours	0.3
More than 24 hours	0
Witness' Report of Offence	7
On-view Report of Offence	1
Usable Fingerprints	7
Suspect Information Developed:	
Description or Name	9
Vehicle Description	0.1
Other	0

Rule: If the weighted value of some or all of these factors are found to exist in the crime report and if these factors add to 10 or more in value, then continue the investigation.

If the total weighted value of the factors is less than 10, then discontinue the investigation.

Source: Greenberg et al. (1972).

TABLE 2

STANFORD RESEARCH INSTITUTE
ROBBERY INVESTIGATION SCREENING MODEL

INFORMATION ELEMENT	WEIGHTING FACTOR
Suspect Named	10
Suspect Known	10
Suspect Previously Seen	10
Evidence Technician	10
Places Suspect Frequented Named	10
Offender Movement Description:	
On Foot	0
Vehicle (not auto)	0.8
Auto	1.5
Auto Colour Given	1.5
Auto Description Given	2.3
Auto License Given	3.8
Physical Evidence:	
Each Item	1.3
Weapon Used	1.8
Vehicle Registration:	
Query Information Available	1.1
Vehicle Stolen	2.3
Useful Information Returned	3.4
Vehicle Registered to Suspect	4.6

Rule: Circle the above weighting factors that appear in the incident report. If the sum of the factors is 10 or above, follow-up the case; otherwise suspend it.

Source: Greenberg et al. (1975).
Team patrol officers reported a much higher degree of co-operation with team investigative personnel than non-team investigative personnel (Bloch and Bell, 1976:8-11).

CHAPTER IV

THE AFTERMATH OF THE RAND STUDY

In the turbulent wake of the RAND study, it has become difficult to identify and keep track of the nature and scope of the change which has occurred, or is occurring, in criminal investigation practices and procedures in North America and in other parts of the world. That change is taking place seems undeniable (Anderson, 1978; Kelling, 1979), much of it attributable to the catalytic action of the RAND study and the study undertaken in Rochester, New York. As one commentator has noted about the latter experiment:

> The study was not definitive, but before long it was clear that, following Rochester's example or acting on their own, police administrators in many areas of the country were coming to the same conclusions about the investigative process. In city after city, they began to implement a now familiar series of changes: they assigned a portion of their generalist detectives to serve under patrol command in neighbourhood units; they permitted uniformed officers to work as investigators for fixed periods, or even made patrol and investigative duties interchangeable; they devised formulas to make assessments of information turned up by preliminary investigations and thus to weed vast numbers of "unsolvable" cases out of active files (Anderson, 1978:4-5).

To assist with the implementation of more effective and efficient management techniques in the field of criminal investigation, the National Institute of Criminal Justice and Law Enforcement (NILECJ) of the United States Department of Justice, in 1976 designated Managing Criminal Investigations (MCI) as the principal police subject in its new National Criminal Justice Executive Training Programme (NCJETP) (Miron et al.,

1979). Over a three-year period more than 700 police executives from more than 400 departments across the United States participated in MCI as many as 90% of the participants returned to their agencies and initiated some sort of changes in the operations and management of their criminal investigation processes (Miron et al., 1979:1).

The NILECJ also sponsored field tests of their proposed MCI program in the police departments of Birmingham, Alabama; Montgomery County, Maryland; Rochester, New York; St. Paul, Minnesota; and Santa Monica, California. The MCI program contained five principal components:

(1) The enhancement of the investigative role of patrol officers. Although not designed to eliminate specialized investigators, the program attempted to maximize the use of patrol officers in conducting preliminary investigations which investigators would not need to repeat.

(2) Case screening. A case screening officer determined which cases required further investigation. Patrol officers were also involved in the screening process through their crime incident reports. Solvability and seriousness of offences were determined according to a scale developed by the participating police agency based upon the SRI model or other similar analyses of solvability factors. Local crime priorities and departmental experience in solving various crimes could be included in the process.

(3) Management of continuing investigations. Police administrators were provided with improved management control procedures over investigations by detectives, including case seriousness, solvability factors and improved investigator supervision techniques.

(4) Police prosecutor liaison. Liaison officer(s) from the prosecutor's office kept police administrators aware of continuous problems associated with prosecutorial charging policies and police investigative priorities. The prosecutor liaison personnel also provided information concerning the quality of investigative reports offered for prosecution, and had the option of screening cases for seriousness and quality of preparation prior to presentation to the prosecutor.

(5) Monitoring. The program included a continual assessment of the quality of work, order of case priority for investigation, and the development of data relevant to the allocation of resources between patrol and general and specialist investigators (Miron et al., 1979:4-5).

Field tests were intended to evaluate increases in efficiency as a result of the implementation of the MCI system. (Published results of these evaluations were not available at the time of the writing of this literature review.)

In addition to the MCI field test project, the NILECJ invited other police departments throughout the United States to adopt the MCI program, under an MCI incentive grant project jointly funded by federal, state and local governments. The over-all impact of this concerted and continuing MCI program has yet to be assessed. An informal assessment (Anderson, 1978) of the MCI field test program has suggested that it has had some beneficial effects in three areas--staffing, effectiveness of patrol, and case screening.

Staffing

It seems to be the view of certain police executives that the MCI program offers them the opportunity to gain control of detective units which have long been non-cost effective and largely autonomous. This new management control has resulted in the redeployment of investigators in a variety of ways (Cox et al., 1977; Staft, 1980), in addition to the development of more sophisticated performance evaluation criteria for detectives (Anderson, 1978).

In Multnomah County, Oregon, for example, the detective bureau traditionally had been divided into two broad sections: "crimes against persons;" and "crimes against property." The "crimes against persons" section teams were responsible for homicide, robbery, and other special investigations. The "crimes against property" section teams dealt with auto theft, general theft, fraud, burglary, arson, bombs and also contained a burglary tactical unit. Other detective teams dealt with youth crime and with forensic science investigations. These detective services employed one of the six captains, five of the fifteen lieutenants and twenty-six of the fifty-four sergeants.

Under the new scheme implemented in Multnomah County in 1975, the central detective bureau was changed into a smaller major felony unit. Personnel not required to work in this unit were transferred to the operations section of the agency and assigned as supervisory personnel or district patrol officers to neighbourhood teams. Under this scheme, district patrol officers became generalist investigators as well as conducting more traditional patrol tasks (Brand and Korloff, 1976; Kauffman, 1976).

The Multnomah County re-organization was not accomplished without problems. During the implementation phase of the re-organization, agency, morale was affected by the reduction or elimination of the specialized

investigation units:

> Personnel transferred from special units to the operations section felt that they had suffered a loss of prestige which they had gained only through many years of hard, dedicated service to the agency ... In addition, patrol officers felt not only that they would be unable to handle the increased workload, as well as continue their other frontline public safety duties, but there now existed even fewer opportunities to advance into a perceptially more prestigious position within the agency (Kauffman, 1976:83).

In addition to the morale problem, difficulties were encountered with the increased administrative load placed on sergeant field supervisors in neighbourhood teams, and in the amount of time spent out-of-service by district patrol officers engaged in criminal investigations. District patrol officers expressed concern about the reduction in the amount of time spent in preventive patrol within their neighbourhoods, even though the Kansas City Patrol Experiment had raised serious questions about the effectiveness of such patrol activities (Kelling, 1974).

Three years after the implementation of the Multnomah County reorganization, the morale problems seemed to have been largely overcome and the new procedures had "become more and more acceptable to the former detectives" (Anderson, 1978:10). The Multnomah County experience, which is similar to that described earlier in Rochester, New York, has now been followed in many other police departments across the United States.

Effectiveness of Patrol

Those who support MCI argue that greater co-operation and communication between patrol officers and investigators leads to more effective investigations. Thus, in Montgomery County, Maryland, a number of detectives were reassigned from the central investigative bureau to work with uniformed patrol officers on a neighbourhood team. To encourage co-operation and teamwork, patrol officers were rotated through two-month tours of detective duty. The result of this experiment seems to have been favourable:

> Before, the uniformed officers felt competition with the detectives ... they believed detectives were out to take their cases away from them. Now they may be teamed up with a detective to pursue an investigation (Anderson, 1978:11).

Supporters of MCI also believe that giving patrol officers greater responsibility for follow-up investigations fills up much of the unstructured time which is a common feature of patrol work. Police departments implementing MCI techniques usually revise their initial crime report forms to provide for a more complete and focused initial investigation by patrol officers (Anderson, 1978:11).

Case Screening

Case screening is the most popular facet of the MCI program. Departments usually develop their own lists of solvability factors, rather than relying upon the more sophisticated SRI models (Anderson, 1978:12). The extent to which departments use case screening for different categories of crime seems to vary widely between jurisdictions. Most police managers agree that homicides and other major crimes of violence, such as rape, should never be screened out. Crimes of this type continue to be dealt with by major felony units or by other central detective bureaus. Case screening is common for less serious crimes, such as burglary and theft. Some departments also use screening tests for robbery.

Apart from the greater control over the management of criminal investigations that screening devices provide, screening also allows police administrators to acknowledge that a substantial percentage of crime cannot be solved, no matter what law enforcement agencies do. Police administrators have been reluctant to make such an admission, fearing public outrage and alarm. However, agencies which have adopted case screening have experienced no public reaction of this type. As a former senior police administrator commented, "the public is much more enlightened than many police chiefs think.... People don't necessarily expect Kojak to show up. It's better to tell the truth" (Anderson, 1978:13).

CHAPTER V

CRIMINAL INVESTIGATION IN THE 1980s

The sustained attention devoted to the criminal investigation process throughout the past decade by police researchers, policymakers and administrators has produced a wealth of information about detectives and their work. This information has provided the rationale for changes in the organization and structure of criminal investigations. Even so, much remains to be learned about the criminal investigation process as controversy continues over research findings and the strategies they suggest.

Reppetto (1978) has remarked that most studies to date have been concerned "with the management science aspects of detective work" (Reppetto, 1978:9). Agreeing with this assessment, Kelling has said that

> with the exception of the RAND study, which did attempt a modest analysis of how investigators spend their time, the studies can provide no linkages between what investigators do and the ultimate outcome of the case. In essence, all are "black box" studies which look at the relationship between input (detective's time) and output (clearances). Most of the studies focus on improving the efficiency of the investigating units through more effective administration, organization, and/or superior methods of case screening. They do not deal with the methods investigators use or the relationship of those methods to case outcomes (Kelling, 1979:14).

Criminal investigation research has not dealt with the broad range of investigations. Most research emphasis has been upon the study of citizen-initiated investigations of serious crimes such as burglary, robbery and larceny. Furthermore, there has been a tendency for criminal investigation studies to accept clearance rates as the only outcome variable by which to evaluate detectives. "The strong possibility exists of perpetuating a theoritical bias about the manifest and latent functions of investigations if research is not broadened to understand all investigative functions," asserts Kelling (1976:16).

To remedy these and other deficiencies in the state of knowledge concerning the criminal investigation process, Kelling has proposed a four-point research program to -

- map the range of investigative functions within police departments;
- explore the parameters of investigative behaviour;
- examine the flow of information regarding a particular sub-set of crime; and
- attempt to explore the relationship between the behaviours of investigators, the flow of information, and outcome (clearance and victim satisfaction with service) (Kelling, 1979:20).

The Police Executive Research Forum has already undertaken research of the type envisioned by Kelling. The PERF is conducting a study of criminal investigations in three areas: St. Petersburg, Florida; Wichita, Kansas; and DeKalb County, Georgia. The study (results of which are

expected to become available in 1982) is intended to answer several questions:

- How are investigations conducted and what occurs during an investigation?
- What factors determine the amount of effort that goes into an investigation (case seriousness, information relatively available at the crime scene, or the workload of the investigation officer)?
- What is the impact of various amounts of effort in an investigation? Do the activities performed and the time expended on a case affect the amount of information gained and the final results obtained?
- Can a well conducted follow-investigation improve the success rate for investigations of cases where little information was obtained during the preliminary investigation? Or are the final results of an investigation determined by the characteristics of the case and the preliminary investigation, as has been suggested by previous research? (PERF, 1980:1).

The results of the first systematic study made in Canada of the work of detectives (Ericson, 1981), confirms the RAND study findings that detectives have little control over crime, being dependent upon citizens and uniformed officers for information about occurrences and the identity of suspects. The Canadian study is based on data derived from an extensive and systematic observation of detectives in a medium-sized police department in Ontario.

Interest in the criminal investigation process is not limited to the United States and Canada, of course. The International Panel of Police Research (IPPR) is comprised of representatives from Germany, Holland, and Sweden as well as from Australia, Canada, the United Kingdom and the

United States. The IPPR, an informal association for the promotion, development and dissemination of police research methodology, theory and research results, has selected criminal investigation as the focus of its initial activities (IPPR, 1980; 1981). A variety of research projects are being conducted by members of this group and the results of these research endeavours should appear in the literature over the next year or two.

Cross-cultural "mapping" of the criminal investigation process should be of great assistance in validating or repudiating the findings of North American research. Bottomly and Coleman (1979), in a study conducted in England, have already confirmed the RAND and other findings concerning the limited role played by detectives in the solution of crimes:

> Most clearups are provided by a suspect being available at the scene of the crime, for a variety of reasons, or by routine questioning of victims and members of the public. If crimes are not"solved" at an early stage, they are likely to remain undetected, unless almost fortuitously cleared at a later stage by an "indirect" method ... A proportion of crimes are cleared by direct detective work in which the police take a pro-active stance, but this must be placed in focus by remembering the investigative activities which do not lead to clearups, and the great part of a detective's time which is spent on activities not related to clearups as such (Bottomly and Coleman, 1979:36).

CHAPTER VI

CRIMINAL INVESTIGATION IN CANADA

In 1971, Ward commented generally upon the dearth of scholarly literature about the criminal investigation process. This comment, while no longer applicable to the United States, continues to hold validity in Canada. With the exception of Ericson (1981), all of the studies mentioned have been carried out in the United States.

However, police researchers, policymakers and administrators in Canada are not unaware of the research findings and developments associated with criminal investigation. In May, 1978, the Research Division of the Ministry of the Solicitor General, in collaboration with the Canadian Association of Chiefs of Police and the Royal Canadian Mounted Police, sponsored a workshop on police productivity and performance (Engstad and Lioy, 1980). Eighty persons were invited to the workshop and were drawn almost equally from the Canadian police community and from researchers involved in law enforcement studies in Canada, the United States and the United Kingdom. One of the discussion groups, led by Peter Greenwood, the principal investigator in the RAND study, was on the subject of criminal investigations. In addition, background material provided to all participants included a summary of the RAND findings.

The workshop participants recognized the increasing economic pressures confronting all levels of Canadian government, which resulted in demands that the police be more cost effective. Among ideas for improving police effectiveness were a number relevant to criminal investigation. It was suggested that

> police constables, carrying out preliminary investigation of a crime, might recommend that where the likelihood of apprehending the criminal, recovering stolen property or developing a sound case for prosecution is low, the case be dropped and not followed up by specialized investigation units (Engstad and Lioy, 1980:236).

Another idea put forward was that

> specialized police functions such as ... general investigation could be returned to the uniformed patrol division. This might create some economies of scale in the general delivery of police services (Engstad and Lioy, 1980:237).

While methods of achieving these proposed changes were not outlined by workshop participants, it was agreed that the transferability of research results from one country to another was questionable and that "caution should be exercised when using research which was done in a different country" (Engstad and Lioy, 1980:270).

These observations illustrate the dilemma facing Canadian police. Research findings from elsewhere can be of broad guidance and assistance. The Calgary police have begun an experiment with formal case screening procedures, based upon the SRI burglary model, and with the reassignment of detectives from a central bureau to neighbourhood teams in a manner suggested by the Rochester study. It is not yet known whether the results of these experiments will be similar to those obtained in the United States. However, although recognizing the possible limitations and deficiencies of traditional methods of investigating crimes, and being aware of external pressures to demonstrate to cost-conscious politicians and citizens that they are providing effective police services, police administrators do not at present possess the benefits of enough Canadian research upon which to base policy changes.

Given this situation, it would be appropriate to initiate a criminal investigation research program in Canada designed specifically to meet the needs and objectives of Canadian police agencies. As a first step, it would be useful to conduct a comprehensive "state-of-the-art" survey of police agencies throughout the country, to gather basic data about such matters as

- the number and conditions of employment of detectives within agencies and their relationship to those of uniformed officers and civilians;
- the organization and structure of criminal investigation services, including the use of specialized detective units, the lines of command, and the relationship of detectives to other components of the police department;
- selection, training, promotion and performance evaluation procedures for detectives;

- current or projected innovations in criminal investigation practices and procedures, including decentralization of detective units, the use of case screening models, revised performance and productivity measures for detectives, increased use of uniformed officers as general investigators, and improvements in police-prosecutor liaison; and

- the assessment of agency research priorities in the criminal investigation area, and of the degree of willingness of agencies to participate in such research.

A national study of this type would accumulate key baseline data around which to formulate a detailed program listing criminal investigation research priorities and objectives. The program could address such critical management questions as:

(1) How much effort should patrol supervisors require of their officers when conducting a preliminary investigation?

(2) Should more effort and resources be put into physical evidence collection and processing?

(3) Which cases should be assigned to a detective for follow-up and under what circumstances?

(4) How long should detective supervisors permit a follow-up investigation to continue?

(5) What activities should be performed during an investigation and what activities seem to waste effort?

(6) How should the information obtained be managed in order to maximize the benefits?

(7) What can reasonably be expected of officers investigating cases and how should performance be measured and judged? (PERF)

Answers to these questions could be provided by Canadian research into the criminal investigation process, which would include observation from the initiation of a crime complaint to the closure of a case. Research might also be focused on community expectations in regard to criminal investigation. One of the concerns expressed by police

administrators about case screening procedures has been the fear that the community would object to the non-investigation of certain crimes. There is no guarantee that findings in the U.S.A. reflect the expectations of the Canadian community. It would therefore seem important to examine these expectations in some depth, to determine the changes in criminal investigation practices that would be acceptable to Canadians.

It was suggested at the outset of this review that detectives seem suddenly to have become a beleaguered species, as police services become increasingly subject to economic and related constraints, and managers try to make law enforcement agencies more efficient. However, it would be foolish to suggest that detectives will disappear during the 1980s. As Reppetto has concluded:

> The view that detective work is becoming less important in policing may be incorrect. While present day...detectives appear to be embattled they are hardly an endangered species. Indeed, they may be moving into a new era of importance (Reppetto, 1978:9).

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CRIMINAL INVESTIGATION - A BIBLIOGRAPHY

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Criminal Investigation, and,
Studies of the Investigation Process and its Impact, with Monographs and Periodicals in two separate sequences.

The Criminal Investigation section is further divided into five sub-sections:

General,
Evidence/Procedure,
History,
Management and Organization,
Rural (including a sub-division on Rural Policing).

The section dealing with Studies of the Investigation Process and its Impact is sub-divided as follows:

Arson,
Burglary/Theft/Fraud,
Computer Crime,
Forensic Science,
Homicide and Other Violent Crimes,
Narcotics,
Organized Crime,
Robbery,
Sexual Offences,
Survey/Quantitative.

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