

Bond University
Research Repository



What's in a Name? Comparing Applied Profiling Methodologies

Petherick, Wayne A.

Published in:
Journal of Law and Social Challenges

Licence:
Free to read

[Link to output in Bond University research repository.](#)

Recommended citation(APA):
Petherick, W. A. (2003). What's in a Name? Comparing Applied Profiling Methodologies. *Journal of Law and Social Challenges*, 5(1), 173-188.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

For more information, or if you believe that this document breaches copyright, please contact the Bond University research repository coordinator.

Criminal Profiling

What's in a Name? Comparing Applied Profiling Methodologies

BY WAYNE PETHERICK*

Introduction

Criminal profiling is an investigative technique that has received a great deal of attention in recent decades, from both academic audiences and mainstream popular culture. It is lauded as an investigative tool¹ and criticized as being tedious and of little use in police investigations.² Criminal profiling in its most basic form is an attempt to discern offender characteristics from the crime scene and the behavior of the offender. It is an inferential process that involves an analysis of offender behavior including their interactions with the victim and crime scene, their choice of weapon and their use of language, among other things.

Profiling is of most use in crimes where the offender displays evidence of psychopathology,³ such as rape, murder, torture and mutilation. However, "it is the behavioral characteristics of the perpetrator as evidenced in the crime scene and not the offense *per se* that determines the suitability of the case for profiling."⁴ Homant and Kennedy⁵ note that

* Wayne Petherick is a forensic criminologist employed by Bond University on Queensland's Gold Coast, Australia. He holds a Bachelor of Social Science (Psychology) from the Queensland University of Technology and a Master of Criminology from Bond. He is currently a PhD candidate examining the development of stalking as a social and legal issue, and the development of criminal profiling as a tool in stalking cases.

1. John E. Douglas, Alan E. Burgess, *Criminal profiling: A Viable Investigative Tool Against Violent Crime*, 55 F.B.I. LAW ENFORCEMENT BULLETIN, Section 12, 9-13 (1986).

2. John Godwin, MURDER USA: THE WAYS WE KILL EACH OTHER, 274-279 (1st ed. New York, Ballantine 1978).

3. Anthony J. Pinizotto, *Forensic Psychology: Criminal Personality Profiling*, 12 JOURNAL OF POLICE SCIENCE AND ADMINISTRATION SECTION 1, 32-40 (1984).

4. Vernon J. Gerberth, PRACTICAL HOMICIDE INVESTIGATION: TACTICS, PROCEDURES

“profilers have also applied their efforts to distinguishing accidental, autoerotic asphyxiation from suicide or homicide to hostage negotiations to stalking, and even bank robbery—not all of which necessarily involve significant psychopathology.”⁶

In spite of its obvious applicability in these cases (profiling “works” best when there is a repetition of behaviors, and such repetition is typical in stalking), there is still a dearth of literature in many areas. For example, stalking is an interpersonal crime that by nature involves repeated harassment and intrusion⁷ providing rich behavioral evidence, yet the literature on profiling this crime is limited.⁸

While the definitions of profiling are considerably uniform, there is a great deal of variance in individual profiling methodologies. Many of the methods adopt the same fundamental structure, an examination of physical evidence, victimology, and crime scene before determining offender characteristics. The differences arise mostly in an analysis of the idiosyncratic abilities of the profiler and what each does with this information. For example, one method may use the collected information to form the basis of a statistical investigation into offender types, while another method might attempt to derive the meaning of individual behaviors through a reconstruction of the physical events. Further, an inductive profiling method may employ a typology to assist with the ascription of offender characteristics, while a deductive method will likely use the same typology to describe their behavior.

It is important to understand the different philosophies that guide the profiling process, as the type of philosophy adopted will dictate the level of certainty with which conclusions can be drawn. Furthermore, the relevance of any investigative guidance offered by the profile may be reinforced or undermined by the way in which offender characteristics are derived. These considerations are paramount to any individual considering profiling as an investigative tool.

AND FORENSIC TECHNIQUES, 711 (3d ed. Boca Raton: CRC Press).

5. Dan Kennedy is principal consultant for Forensic Criminology Associates and Professor of Human Services, Criminal Justice Studies and Security Administration at the University of Detroit Mercy College of Education and Human Services. Robert Homant is Chair of Human Services and Chair of Criminal Justice at the University of Detroit Mercy College of Education and Human Services.

6. Robert J. Homant, Daniel B. Kennedy, *Psychological Aspects of Crime Scene Profiling*, 25 *Criminal Justice and Behavior* 3, 323 (1998).

7. Paul E. Mullen, Michele Pathe, Rosemary Purcell, *STALKERS AND THEIR VICTIMS*, 6-10 (1st ed. Cambridge University Press 2000).

8. Wayne A. Petherick, Stalking, in *CRIMINAL PROFILING: AN INTRODUCTION TO BEHAVIORAL EVIDENCE ANALYSIS* 497-499, 506 (2d ed. London Academic Press 2002).

Inductive and Deductive Criminal Profiling

At a macroscopic level, a criminal profile can be inductive or deductive. Inductive profiling methods can be distinguished by their reliance on statistical analysis of offenders and offender groups. The statistical analysis is then used as the basis for comparison with the current offense to determine similarities and differences. Criminal inductive profiling differs from the typical social science definition of "induction" which begins with detailed observations of the world and moves towards more abstract generalizations and ideas.⁹ Induction relies on information derived from averaged offender types, "inferring about a whole group on the basis of knowing about a case or a few cases."¹⁰ These methods require a hefty assumption on the part of the profiler that the current case is in fact similar to past cases with which it is being compared. It may be difficult to tell under the circumstances whether the current case is indeed similar to past cases, or whether there has been some extraneous influence that has created the similarity such as a disrupted offense, the use of alcohol or drugs, or domestic violence offenses.¹¹

Further, inductive conclusions are more likely to be true *if* the premises are true;¹² and therefore more latitude is afforded in their conclusions. A premise is a piece of information or evidence, while a conclusion is the decision about the meaning of that information or evidence, *vis a vis*, an offender characteristic. Problems may arise if the profiler fails to establish the validity of the premise before drawing conclusions from it. Inductive profiling methods include Crime Scene Analysis, Investigative Psychology, and Geographic Profiling.

In contrast, the deductive methodology refers to methods which are rational or logical, and where the conclusions follow directly from the premise.¹³ Under a deductive paradigm, if the premise is true, then the conclusion *must* also be true. For this reason, a profiler utilizing a deductive approach will spend a good deal of time examining individual premises to determine their validity. It is acknowledged that comparatively speaking this method is more time consuming, but to characterize it as

9. W. Lawrence Neuman, Bruce Wiegand, *CRIMINAL JUSTICE RESEARCH METHODS: QUALITATIVE AND QUANTITATIVE APPROACHES*, 45 (Boston, Allyn and Bacon 2000).

10. F.E. Hagan, *RESEARCH METHODS IN CRIMINAL JUSTICE AND CRIMINOLOGY*, 24 (5th ed., Boston: Allyn and Bacon 2000).

11. These conditions may affect the presentation of the crime scene on which the offender characteristics are derived and are discussed further in a subsequent section. *Id.*

12. Tom Bevel, Ross M. Gardner, *BLOODSTAIN PATTERN ANALYSIS: WITH AN INTRODUCTION TO CRIME SCENE RECONSTRUCTION*, 61 (Boca Raton: CRC Press 1997).

13. *Id.*

“agonizingly slow”¹⁴ is extreme. While this approach may appeal to common sense, it is all too often abandoned in favor of an inductive method, which requires a great deal less education, training and effort. The main advocate of the deductive method is Turvey, who developed Behavioral Evidence Analysis.

Bevel¹⁵ and Gardiner¹⁶ provide the following examples of inductive and deductive reasoning:

Premise: A fingerprint, in “A’s” blood, is on a knife. The print belongs to “B.”

Conclusion: “B” was in contact with the knife after “A” began to bleed.¹⁷

The above deductive reasoning shows the limits of the available evidence. The conclusion does not include any supposition about who was involved in what, or with whom, but works only within the limits of the physical evidence. In such a case, further investigation and analysis are required before additional conclusions can be made. In combination with the former example, the next example highlights how induction often goes beyond what can be established by the physical evidence:

Premise: “A” was stabbed at point “Z.” The knife containing the incriminating print was also found at point “Z.”

Conclusion: “B” was involved in the assault of “A.”¹⁸

It should be clear how the above reasoning extends well beyond the logical limits of the evidence, and how supposition supplants the parameters imposed by what is currently known as fact.

Crime Scene Analysis

Perhaps the best-known inductive method is Crime Scene Analysis used by the Federal Bureau of Investigation (FBI), which employs the “organized/disorganized” offender dichotomy. While this terminology first appeared in a publication in 1980,¹⁹ it is predominantly an outgrowth of a

14. R.M. Holmes, S.T. Holmes, *PROFILING VIOLENT CRIMES*, 5 (3d ed. Thousand Oaks: Sage 2002).

15. Tom Bevel is an Associate Professor in the Master’s level Forensic Sciences Program at the University of Central Oklahoma and a former Commander of the Oklahoma City Police Department.

16. This is true, but it should say, “Ross M. Gardner is a Command Sergeant and Special Agent with the United States Army Criminal Investigation Command.”

17. Bevel, *supra*, note 12, at 61.

18. *Id.*

19. Hazelwood, R. R., & Douglas, J. E., *The Lust Murderer*, FBI LAW ENFORCEMENT BULLETIN, 49 (4), 1 – 5 (1980).

major study conducted in the early 1980's by agents from the Behavioral Sciences Unit.

“Organized offenders” are literally organized in all facets of their lives; they clean up their crime scenes, remove weapons or evidence, and make an attempt to hide the body. They are methodical and will premeditate their crimes.²⁰ In contrast, “disorganized” offenders makes no attempt to clean up their scene; they do not remove weapons or evidence, and will leave the body at the crime scene.

Ressler²¹ & Schachtman acknowledge that this terminology was “dumbed down” somewhat for use by a law enforcement community who typically had little or no training in the disciplines of psychology or psychiatry.²² They explain:

To characterize the types of offenders for police & other law enforcement people, we needed to have terminology that was not based on psychiatric jargon. It wouldn't do much good to say to a police officer that he was looking for a psychotic personality if that police officer had no training in psychology. . . Instead of saying that a crime scene showed evidence of a psychopathic personality, we began to tell the police officer that such a crime scene was ‘organized’ & so was the likely offender, while another & its perpetrator might be ‘disorganized,’ when mental disorder was present.²³

20. Kocsis, R., Cooksey, R. W., & Irwin, H. J., *Psychological profiling of sexual murderers: An empirical model*, INTERNATIONAL JOURNAL OF OFFENDER THERAPY AND COMPARATIVE CRIMINOLOGY, 46 (5), 532 – 54 (2002).

21. Robert Ressler is a retired FBI Agent and one of the founding agents of the Behavioral Sciences Unit.

22. Ressler, R. K., & Schachtman, T. WHOEVER FIGHTS MONSTERS: THE TRUE STORY BEHIND THE BRILLIANT FBI DETECTIVE BEHIND THE SILENCE OF THE LAMBS (New York: Pocket Books 1992).

23. *Id.* at 113 – 14.

Figure 1 illustrates the crime scene characteristics of each class of offender:

<u>Psychopathic (organized) crime scene characteristics</u>	<u>Psychotic (disorganized) crime scene characteristics</u>
Offense planned	Spontaneous offense
Victim is targeted stranger	Victim or location known
Personalizes victim	Depersonalizes victim
Controlled conversation	Minimal conversation
Crime scene reflects control	Crime scene random and sloppy
Demands submissive victim	Sudden violence to victim
Restraints used	Minimal use of restraints
Aggressive acts prior to death	Sexual acts after death
Body hidden	Body left in view
Weapon/evidence absent	Evidence/weapon often present
Transports victim	Body left at death scene

*Figure 1: Crime Scene Characteristics of the Organized and Disorganized Offender.*²⁴

Without oversimplifying the method, classification may go along these lines: studies have determined that an offender type “A” may exhibit behaviors M, N and O, while an offender type “B” may exhibit behaviors X, Y and Z. If, in any given offense behaviors M, N and O are evidenced, then it is assumed that the offender is type “A.” This will inform the profiler that the offender possesses characteristics typical of offender type “A.” Using Crime Scene Analysis, this would be translated thus: an organized crime scene reflects an organized offender (with determination being made from characteristics in Figure 1), and a disorganized crime scene reflects a disorganized offender (with subsequent offender characteristics determined from Figure 2). The offender characteristics of each class are presented in Figure 2:

24. Ressler, R. K., & Burgess, A. W., *Crime scene and profile characteristics of organized and disorganized murderers*, FBI LAW ENFORCEMENT BULLETIN, 54 (8), 18 – 25 (1985).

**Psychopathic (organized)
offender characteristics**

Average to above average intelligence
 Socially competent
 Skilled work preferred
 High birth order status
 Father's work stable
 Inconsistent childhood discipline
 Controlled mood during crime
 Use of alcohol with crime
 Precipitating situational stress
 Living with partner
 Mobility with car in good condition
 Follows crime in the news media
 May change jobs or leave town

**Psychotic (disorganized)
offender characteristics**

Below average intelligence
 Socially inadequate
 Unskilled work
 Sexually incompetent
 Low birth order
 Father's work unstable
 Harsh discipline as a child
 Anxious mood during crime
 Minimal use of alcohol
 Minimal situational stress
 Living alone
 Lives/works near crime scene
 Minimal interest in news media
 Significant behavior change

Figure 2: Crime Scene Characteristics of the Organized and Disorganized Offender²⁵

This method of profiling is prevalent today, and is typically practiced by those who have trained with the FBI. Many other groups have adopted this as the preferred method, with the Dutch profiling unit being one such example.²⁶ While adopting an FBI approach, a crucial difference is that the Dutch regularly assess the reliability and validity of their claims.²⁷

Despite its widespread usage, the method is not without its critics. Turvey has noted a number of significant shortcomings.²⁸ Perhaps most notable is the fact that an organized offender can leave a disorganized crime scene when the crime is a domestic violence related offenses, a staged offense, an interrupted offense, an offense involving controlled substances and cases where the offender is an angry, retaliatory offender

25. *Id.*

26. Jackson, J.L., & Bekerian, D. A. , OFFENDER PROFILING: THEORY, RESEARCH AND PRACTICE (1997).

27. Ainsworth, P., OFFENDER PROFILING AND CRIME ANALYSIS (Devon: Willan Publishing 2001).

28. Turvey, B. E., CRIMINAL PROFILING: AN INTRODUCTION TO BEHAVIORAL EVIDENCE ANALYSIS (2nd ed., London: Academic Press 2002).

who does not suffer from any kind of mental illness.²⁹

In addition, this method “simply reduces human behavior to a few observable parameters which lead to the characteristics of the unknown offender.”³⁰ The various characteristics provided in the model are not weighted or given any order of priority. While a template of the crime scene and offender characteristics are provided, it is ultimately left up to the individual practitioner to determine which characteristics may apply. Finally, there may be an element of ethnocentricity inherent in the data; there is concern that the study of a U.S. prison population may not apply cross-culturally. The study’s reliability within another cultural group is doubtful.³¹

Investigative Psychology

Investigative psychology (IP) is a collection of psychological techniques developed by British psychologist, David Canter.³² These techniques form the basis of the IP approach, of which profiling is one component. It is an inductive method that is “dependent on the quality and the amount of data accumulated.”³³ While many inductive methods suffer the fatal flaw of limited sample sizes, Canter is continually building an empirical base from which to work.³⁴ Investigative Psychology introduces:

[A] scientific and systematic basis to previously subjective approaches to all aspects of the detection, investigation and prosecution of crimes. This behavioral science contribution can be thought of as operating at different stages of any investigation, from that of the crime itself, through the gathering of information and on to the actions of police officers working to identify the criminal then on to the preparation of a case for court.³⁵

IP adopts a five step approach to offender profiling which includes interpersonal coherence, significance of time and place, criminal characteristics, criminal career and forensic awareness.

Interpersonal coherence is the way people adopt a style of behavior

29. *Id.* at 226.

30. *Id.*

31. Wilson, P., Lincoln, R., & Kocsis, R., *Validity, utility and ethics of profiling for serial violent and sexual offenders*, *PSYCHIATRY, PSYCHOLOGY AND LAW*, 4 (1), 1 – 12 (1997).

32. David Canter is Professor of Psychology at the University of Liverpool and the main proponent of the Investigative Psychology model.

33. McGrath, M. G., *Criminal profiling: Is there a role for the forensic psychiatrist?* *JOURNAL OF THE AMERICAN ACADEMY OF PSYCHIATRY AND LAW*, 28, 319 (2000).

34. Egger, S. A. *THE KILLER AMONG US: AN EXAMINATION OF SERIAL MURDER AND ITS INVESTIGATION* (New Jersey: Prentice Hall 1998).

35. University of Liverpool. *Investigative psychology* (2002), Available from: <http://www.liv.ac.uk/InvestigativePsychology/>. (Accessed on February 18, 2002).

when dealing with others.³⁶ It refers to the consistency between offending and non-offending behavior; that criminals will act the same way towards the victim as they act towards people in daily life. Canter suggests that the same characteristics that are exhibited during a criminal's offenses are visible in their everyday life. Therefore, a rapist who exhibits 'selfish behavior' during an assault may well exhibit characteristics of selfishness in everyday life.³⁷ The belief that the behavior of offenders during offenses will be similar to their everyday interpersonal relationships is not unique to Investigative Psychology. Most profiling methods rely on this assumption.

The significance of time and place draws on theoretical models employed in environmental criminology. The offenses may occur at a time or place that holds some personal significance that may tell you something about the offender. A rudimentary example of this would be the perpetrator who offends while traveling along a major road or highway—this may indicate that travel is a part of the offender's job, such as a courier or truck driver. Conversely, crime scenes that are proximal may indicate a lack of access to transport. The suggestion is that in certain crimes, "an offender will feel more comfortable and 'in control' in an area which he knows well."³⁸

Criminal characteristics assist investigators in establishing what type of crime they are looking at by establishing typical characteristics of that offense. The aim is to see "whether the nature of the crime and the way it is committed can lead to some classifications of what is characteristic. . .based upon interviews with criminals and empirical studies."³⁹ This is similar in nature to what the profilers from the FBI have attempted to do with their extant organized/disorganized maxim.

The penultimate example is the criminal career. This suggests that criminals operate in a consistent fashion throughout their crimes though their behavior is also subject to change and adaptation. An examination of a rapist's behavior may, by virtue of their skill in entering a premises undetected, provide some insight into prior offenses in which their burglary skills have been honed.

Forensic awareness, the final facet, is closely related to the criminal career. This bears behavioral witness to an offender's knowledge of the

36. Canter, D. , *CRIMINAL SHADOWS: INSIDE THE MIND OF THE SERIAL KILLER* (London: Harper Collins 1995).

37. Ainsworth, P., *OFFENDER PROFILING AND CRIME ANALYSIS* (Devon: Willan Publishing 2001).

38. *Id.* at 199.

39. Canter, D. , *Offender profiles*, *THE PSYCHOLOGIST*, 2 (1), 14 (1989).

justice system and its procedures. A rapist who uses a condom during a sexual assault and takes it with him after a crime may have an arrest history, while a murderer who picks up cartridge casings after a shooting may be aware they could be used to link offenses. These behaviors all suggest knowledge of a specific type, and provide insight into the offender's psyche.

From this information, there are five characteristics or clusters that are important in helping criminal investigators compile the offender's criminal profile.⁴⁰ These include (1) residential location, (2) criminal biography, (3) domestic/social characteristics, (4) personal characteristics and (5) occupational/educational history.

There is significant criticism of Investigative Psychology. First, it suffers many of the same failings as other inductive methods noted in this paper. Secondly, many of the statistical procedures used will take a single behavior and interpret it outside of the context in which it occurs.⁴¹ For example, if a rapist bites the breast of a victim during an assault, this behavior has for all intents and purposes the same meaning regardless of its motivation. On the one hand, you may have an offender who is trying to correct resistance presented by the victim to the assault, and on the other hand you may have an offender who is biting out of sadistic impulses. The two motivations, and subsequent meaning of the behavior, are different but may be treated as homogenous by an Investigative Psychology analysis.

Geographic Profiling

Geographic profiling is another inductive method, and has been developed for the most part by D. Kim Rossmo, formerly police officer for the Vancouver City Police Department. Its primary aim is to examine a series of related crime scenes and to determine, based on computer analysis, where an offender's likely residence may be. A computer program generates a probability area (called a jeopardy surface) that is then overlaid onto an isopleth map of the region.⁴² The jeopardy surface is color-coded and will dictate with probability where the search for the suspect should begin or focus. For example, a red area at the center of the map may indicate a 95 percent degree of certainty to contain the offender's residence.

40. Ainsworth, P., *OFFENDER PROFILING AND CRIME ANALYSIS* (Devon: Willan Publishing 2001).

41. Turvey, B. E., *CRIMINAL PROFILING: AN INTRODUCTION TO BEHAVIORAL EVIDENCE ANALYSIS* (London: Academic Press 1999).

42. Rossmo, D. K., *GEOGRAPHIC PROFILING* (Boca Raton: Florida 2000).

While algorithms are involved, the concept of geographic profiling rests on a fairly simple premise: that an offender's residence lies at the center of their crime patterns and can be found through the spatial mean.⁴³ Figure three represents this graphically (with the crime represented by the arrow head, and the residence by the circle between arrows):

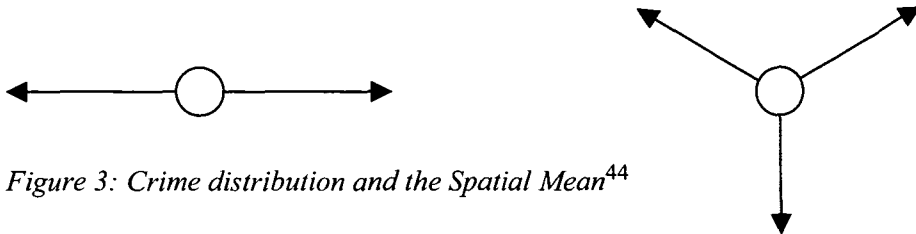


Figure 3: Crime distribution and the Spatial Mean⁴⁴

Another theory on which geographic profiling rests is distance decay, which suggests that there is a spatial pattern of offending where most crimes are committed close to home, rather than further away.⁴⁵ The assumption is easy to reconcile: people are essentially lazy and will choose the path of least resistance over more difficult and time-consuming actions.

Critiques of geographic profiling are many and varied. In *Rossmo v. Vancouver (City) Police Board*,⁴⁶ it was noted that, “there is little apparent evidence of enhanced policing outcomes” and that there have been no definitive applications of the geographic profiling model in the Vancouver Police Department.⁴⁷

Turvey has leveled a number of criticisms at geographic profiling.⁴⁸ First, geographic profiling takes a single manifestation of offender behavior and analyses it outside of the context in which it occurs (for example, an issue of victimology may have been pivotal in offense location selection but this may be attributed to the offender's spatial behavior in absence of this other knowledge. And, while *Rossmo* claims to require a psychological profile before a geographic profile can be performed, he has been known to proceed without one. The result of ignoring important behavioral and case context and not utilizing fully drawn profiles is that

43. *Id.*

44. *Id.*

45. Van Koppen, P. J., & de Keijser, J. W. , *Desisting distance decay: On the aggregation of individual crime trips*, *CRIMINOLOGY*, 35 (5), 505 – 515 (1997).

46. *Rossmo v Vancouver (City) Police Board*. (2002). Available at: <http://www.hamilton-law.ca/cases/rossmo.htm>. (Accessed on February 19, 2001).

47. *Id.*

48. Turvey, B. E., 262 – 63, *CRIMINAL PROFILING: AN INTRODUCTION TO BEHAVIORAL EVIDENCE ANALYSIS* (London: Academic Press 1999).

geographic profiling does not, and can not, differentiate between two or more offenders operating in the same geographic area.

Geographic profiling also assumes that all cases submitted for analysis have been linked by law enforcement. It does not check the veracity of this or any other information submitted. It takes for granted that most offenders live near or within easy reach of their offense area. Finally, Rossmo's dissertation, on which much of the fundamental premises of geographic profiling are based, outlines the weaknesses and shortcomings of the published research on serial murder. He then goes on to base many of his theories regarding geographic profiling, and the software used, on this same flawed theoretical foundation. The technology used in the analysis is impressive but is subject to scientification (the use of technology to bolster a theory to enhance its credibility). It still requires an analyst to perform many of the functions required for the final product.

McGrath⁴⁹ also expresses some concern over aspects of geographic profiling. He notes that this approach may be problematic when working with a small number of cases and where related cases have not yet been linked or identified.⁵⁰ In addition, the underlying theory of geographic profiling is largely related to burglaries and other crimes that may not translate well to violent interpersonal crimes.

Behavioral Evidence Analysis

Behavioral Evidence Analysis (BEA) is a newcomer to the field of profiling. It is primarily the work of a forensic scientist who draws on established principles of science, psychology, criminology and related fields. BEA is primarily deductive in nature. Under this paradigm a conclusion cannot be drawn about an offender's personality or behavioral characteristic unless there is specific physical evidence that suggests it. BEA works only with what is known to be fact, not what is assumed or surmised on the basis of one's experience, education or training.

Like IP, the process of BEA rests upon the gathering of information through a step-wise process, in which latter stages build upon information from former stages. These stages are logical and information gleaned from an earlier stage of the profile will assist in determinations in later stages.

The first stage is referred to as the Equivocal Forensic Analysis in which all of the available physical evidence is examined to determine its

49. Michael McGrath is a forensic psychiatrist working out of Rochester, New York. Dr. McGrath is the President of the Academy of Behavioral Profiling.

50. McGrath, M.G., *Criminal Profiling: Is there a role for the forensic psychiatrist?* JOURNAL OF THE AMERICAN ACADEMY OF PSYCHIATRY AND LAW, 28, 315-324 (2000).

veracity and relevance to the current case. It may also serve to enhance the legal quality of evidence gathered. This stage informs the profiler what evidence they have to work with, what evidence may be missing or misinterpreted, and the value or weight to afford the evidence. This stage is elementary to the rest of the process.

Victimology, the second stage, is the study of victims⁵¹ and involves a detailed examination of all facets of the victim: their work, hobbies, friends, enemies, drug and alcohol history, and any other relevant details. Most importantly, information derived from a thorough examination of the victim can inform the profiler on issues of case linkage and may suggest the nature or degree of relationship between the victim and the offender. It is also useful in determining victim and offender risk, which may be categorized as high, medium or low. Victim risk refers to the likelihood of a particular victim suffering harm or loss, while offender risk “is the amount of exposure to a possibility of suffering harm, loss, or identification and capture.”⁵² Ideally, the profiler should get to know the victim as well as, if not better than, their own friends and family.

The third stage involves determining crime scene characteristics. This will inform the profiler about, “method of approach, method of attack, method of control, location type, nature and sequence of any sexual acts, materials used, any verbal activity, and precautionary acts.”⁵³ If a victim is attacked with brutal force and many wounds are evident, yet little blood is found where the body was discovered, this indicates that another crime scene is present and needs to be located for its potential evidentiary value. In addition, a typically careful victim of sexual assault, who displayed no sign of a struggle, may indicate a prior relationship between the victim and the offender. These examinations are the province of the crime scene characteristics stage.

The final stage is where the actual profile is rendered and is referred to as offender characteristics. This involves an integration of information from all of the previous stages, and is essentially where most conclusions about the offender reside. Under a deductive model, determinations of age, sex and race are not usually made unless specific forensic evidence exists which may be suggestive of this, as these are typically the result of inductive generalizations.

51. Turvey, B.E., 41, *CRIMINAL PROFILING: AN INTRODUCTION TO BEHAVIORAL EVIDENCE ANALYSIS* (2nd ed., London: Academic Press 2002).

52. *Id.* at 146.

53. Turvey, B.E., 41, *CRIMINAL PROFILING: AN INTRODUCTION TO BEHAVIORAL EVIDENCE ANALYSIS* (2nd ed., London: Academic Press 2002).

To characterize this method as purely deductive would be erroneous. Even within a primarily deductive approach some determinations are based on inductive philosophies. Victim or offender risk assessment is based on what is known about certain victim groups and their exposure to suffering harm or loss. Prostitutes are a prime example. Generally speaking, a prostitute is at higher risk of victimization due to the dangers inherent to their profession such as the fact that they are often out late at night, engage in sexual relations with strangers whom they may follow to unsafe locales, and are deemed “disposable.”⁵⁴

As BEA relies heavily on forensic science, and reconstructions of the physical criminal event, other premises may be based on statistical study. Wound patterns and motive are two such examples. The main difference between inductive and deductive approaches is the reliance on this information, and the degree to which it guides the conclusions in the profile. For example, if a prostitute is murdered, a principally inductive approach suggests that because of her profession she was at high risk of victimization. However, a more in depth deductive approach may determine that she had a small select clientele, was naturally cautious, had taken self defense training, and worked only in established premises. All of these factors work towards reducing her overall risk.

Because method is relatively new, there has been little evaluation of this method and little published beyond two main texts⁵⁵ and some journal articles.⁵⁶ McGrath provides an important observation related to the deductive method, that is, if “an initial premise is wrong, or is based on a misinterpretation of crime scene evidence, subsequent inferences will be wrong.”⁵⁷ It is incumbent upon the profiler to ensure they are working with the most relevant and accurately interpreted evidence as possible.

Holmes & Holmes⁵⁸, dedicate some discussion to this approach in the latest incarnation of their often-cited *Profiling Violent Crimes*.⁵⁹ They note that “much care is taken from the examination of forensic reports, victimology, and so forth and the report will take much longer to develop

54. Egger, S. A., *THE KILLER AMONG US: AN EXAMINATION OF SERIAL MURDER AND ITS INVESTIGATION* (New Jersey: Prentice Hall, 1998) ; *Id.*

55. *Id.*

56. The Journal of Behavioral Profiling available: <http://www.profiling.org>.

57. McGrath, M. G., *Criminal profiling: Is there a role for the forensic psychiatrist?* *JOURNAL OF THE AMERICAN ACADEMY OF PSYCHIATRY AND LAW*, 28, 320 (2000).

58. Ronald Holmes is Professor of Criminal Justice at the University of Louisville, and Stephen Holmes is Assistant Professor of Criminal Justice at the University of Central Florida.

59. Holmes, R. M, & Holmes, S. T. *PROFILING VIOLENT CRIMES* (3rd ed., 2002).

using only this approach.”⁶⁰ The reader is left with the impression that the authors decry the value of the deductive approach because of the time involved, and any benefit is disparaged as being too slow.

Perhaps the greatest flaw of violent crime profiling is where the authors note that “with the deductive approach. . .one assumption is that any crime is accompanied by fantasy.”⁶¹ The reason the deductive method is preferable to scientists is that it makes no such assumptions, which actually helps eliminate *a priori* bias where investigators develop theories unsupported by facts that then guide the rest of the investigation. These *a priori* biases may contribute to miscarriages of justice and while all profiling “carries the inherent risk of causing an investigation to target an innocent individual,”⁶² this risk may be reduced by a thorough examination of the facts and the adoption of the scientific method.

Conclusion

It is difficult to claim that any approach is “right” or “wrong,” in fact there are significant and clear shortcomings with many of the methods. One way the investigator can ensure that they are not wasting time and resources when employing a criminal profile is to inform themselves of these shortcomings. Inductive methods, those relying on statistics and averaged offender types, while most prevalent, appear to present the most pitfalls. These range from issues of reliability to problems in application. Inductive approaches have been around for a considerably longer time, and this longevity makes them most prone to scrutiny and critique.

In contrast, deductive approaches that rely on an in depth examination of all facets of the physical evidence are less prevalent. While there are certainly pitfalls in the deductive approach, they are easier to control for. This method requires that the profiler be educated in a variety of applied areas such as forensic science, psychology, psychiatry and criminology, which are not always elementary in other approaches. There are no such requirements in many statistical approaches.

Clearly, the effectiveness of individual approaches is a subject that is worthy of greater attention. However, before this can be undertaken, it is necessary to understand the foundations on which different types of reasoning are based. Some approaches may lead to more informed conclusions about the offender, being based on physical evidence and not

60. *Id.*

61. *Id.* at 7.

62. McGrath, M. G., *Criminal profiling: Is there a role for the forensic psychiatrist?* JOURNAL OF THE AMERICAN ACADEMY OF PSYCHIATRY AND LAW, 28, 318 (2000).

generalization or intuition. Whatever the approach, further education and development is required before we can reap the full benefits of the criminal profiling process.