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THE USE OF OFFENDER PROFILING EVIDENCE IN CRIMINAL CASES

BY

NORBERT EBISIKE

A DISSERTATION SUBMITTED FOR THE DEGREE OF DOCTOR OF JURIDICAL SCIENCE AT GOLDEN GATE UNIVERSITY SCHOOL OF LAW, SAN FRANCISCO, CALIFORNIA

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Research Methodology

This dissertation is a qualitative research with two methods of study. It involved interviews with Crime Scene Analysts and Offender Profilers. This method provided first hand and up to date information on the different approaches to offender profiling.

The standard legal research method of case analysis has also been used. This involved extensive case analysis. Cases that involved offender profiling have been analyzed. This method provided adequate background information on the admissibility problems of offender profiling evidence.

The limitation to this dissertation is the unwillingness of some profilers to grant interviews and share their knowledge.

Abstract

This dissertation examined the use of offender profiling evidence in criminal cases. The meaning, history, approaches and legal admissibility of offender profiling have been discussed. The introduction of offender profiling into the courtroom has been controversial, problematic and full of inconsistencies. This dissertation therefore, examined the central problems with offender profiling evidence, and answered such questions as – Is offender profiling impermissible character evidence? Who is qualified to give expert profiling evidence? Is offender profiling too prejudicial than probative? Is offender profiling an opinion on the ultimate issue? Is offender profiling sufficiently reliable as to be admissible? This dissertation has noted that in United States, there are inconsistencies in the court decisions on offender profiling evidence as a result of the three conflicting rules governing the admissibility of expert evidence. After a critical examination of the three rules, the adoption of one rule has been suggested. The *Frye* test standard combined with the *Federal Rules of Evidence* 702 provides the best admissibility standard.

Many people are confused as to the appropriate discipline of offender profiling. This dissertation has therefore, presented a step by step analysis of the history and development of offender profiling. Offender profiling is a multi-disciplinary practice that cuts across many disciplines. At the moment, it is best described as an art with the potential of becoming a science. This dissertation concludes that offender profiling is not

sufficiently reliable as to be admissible. It is too prejudicial than probative. This dissertation also concludes that there is an uneasy relationship, lack of unity and absence of sharing information amongst the different segments involved with offender profiling, and that this problem has limited the potential of offender profiling. Hence, some courts are not convinced as to the reliability and validity of this technique. Several recommendations have been made.

Introduction

In spite of the ever-increasing media interest in the use of offender profiling in criminal trials, this technique is still not well understood by a lot of people, including judges, lawyers and jurors. Some people see offender profiling as some sort of mystic and others simply see it as a fiction. It is the aim of this dissertation to demystify offender profiling and try to raise the general level of knowledge and understanding of this crime investigation technique. This dissertation has two hypotheses. The first is that offender profiling is not widely accepted in courts because its reliability and the scientific basis has not been established and second, that there are inconsistencies surrounding the admission of offender profiling as a result of the conflicting rules and standards governing its admissibility in various jurisdictions. The central thesis of this dissertation is that offender profiling is not sufficiently reliable as to be admissible (in proving the guilt or innocence of an accused), its prejudicial effect substantially outweighs its probative value and that there is an uneasy relationship, lack of unity, cooperation and absence of sharing of information among the different segments/profilers which has limited the potential of offender profiling. There is the problem with the existence of three rules governing the admissibility of expert evidence in United States. This has led to inconsistencies in the decisions to admit or exclude offender profiling and its derivatives. There has been a lot of conflicting court decisions on this technique.

This dissertation examined the central problems of offender profiling evidence. Two questions provided the guideline to this dissertation. First, is offender profiling sufficiently reliable as to be admissible? Offender Profiling involves gathering information from the crime scene, witnesses, victim statements, autopsy reports, offender's physical descriptions, race, age, criminal records and so on. The question then is - how accurate is information gathered in this manner? Should it be tendered in court as proof of guilt or innocence? Offender Profiling does not point to specific offenders. It does not determine whether a given defendant committed a specific act. This question arises because in several cases the reliability and accuracy of offender profiling has been at issue. Second, is offender profiling more prejudicial than probative? Offender profiling is too prejudicial to the accused. Offender profiling only provides an indication of the type of person likely to have committed a type of crime. It does not point to a specific individual. This question arises because in several cases examined, courts have been inconsistent in their decisions on this issue.

In chapter one, we have discussed the meaning and nature of offender profiling. The goals of offender profiling have also been discussed. Offender profiling is an innovative but worrying technique of crime investigation. In order to have a better understanding of this technique, the history and development have been discussed in this chapter.

Offender Profiling is mainly used by the police to narrow down suspects list in cases where no physical evidence were left at the crime scene. In recent times however, this technique has been introduced into the courtroom as evidence and there has been a lot of

controversy surrounding it. Hence, there had been conflicting court decisions on its status as admissible evidence. In several cases, the reliability, validity and scientific basis of this technique had been at issue. Chapter two therefore, introduced us to the principles and practice of offender profiling. The different approaches to profiling have been discussed, bringing out their various strengths and weaknesses.

In chapter three, the general rules and principles governing the admissibility of scientific evidence are discussed. The *Frye* Test Standard, The *Federal Rules of Evidence*, The *Daubert* Decision and the *Kumho Tire Co.* decision have been critically examined. As we mentioned earlier on, there are a lot inconsistencies surrounding the admission of offender profiling in criminal cases. One reason has been identified and it relates to the fact that there are three main rules governing the admissibility of scientific evidence. The three rules are as follows. The *Frye* Test Standard, The *Federal Rules of Evidence* and The *Daubert* Decision. Each state in United States has adopted one of these rules/standards. Some states are using *Frye,* some have adopted the *Daubert* criteria while others have adopted *Frye* plus their own *Rules of Evidence*. It should be noted that the *Daubert* criteria is the main rule at the federal courts. This leads us to the question - Is it possible to adopt one particular rule? This is a question that has also been examined.

This dissertation is also aimed at providing a critical analysis of the use of offender profiling in criminal cases. Hence, in chapter four, we discussed the central problems of offender profiling evidence. Cases that involved offender profiling have been critically

examined. The different areas of challenging offender profiling have also been discussed. We have answered such questions as:

(1) Is offender profiling impermissible character evidence?

(2) Who is qualified to give expert offender profiling testimony?

(2) Is offender profiling too prejudicial than probative?

(3) Is offender profiling an opinion on the ultimate issue?

(4) Is offender profiling sufficiently reliable as to be admissible?

One of the aims of this research is to provide a comparative analysis of the use of offender profiling in various jurisdictions. In chapter five therefore, we have discussed the admissibility of offender profiling in England and Canada. We have also examined the state of offender profiling in other countries.

In this dissertation we have made some recommendations, looked at the future of offender profiling and have suggested areas where further research is needed. This dissertation argues that offender profiling is a specialized area of knowledge, but at the moment it has not reached a sufficient level of reliability as to be admissible. This dissertation is very critical of the continued admission of offender profiling in criminal trials and concludes that offender profiling is a technique based on assumptions, suspicion, stereotypes and probabilities.

This dissertation differs from other previous published studies in many ways. First, this work has presented an interdisciplinary and non-segmental approach to the understanding

of offender profiling. The nature, theory, practice and the legal aspects of offender profiling have been presented in one study. This dissertation goes further with the theory that offender profiling can be used in developing crime prevention measures. There has also been an examination of offender profiling in a comparative perspective. Above all, none of the previous published studies examined the uneasy relationship among the different segments/approaches to offender profiling which has limited the potential of this technique. This work has demystified offender profiling.

CHAPTER ONE

What is Offender Profiling?

> 'Offender profiling' has become part of public consciousness even though many people are not really sure what it is and the great majority of people have no idea at all of how it is done. This ignorance is just as prevalent in professional circles as amongst the lay public. Psychologists, psychiatrists, probation officers and social workers all have an interest in how their disciplines can contribute to police investigations, but few practitioners are aware of exactly what the possibilities for such contributions are. Others, such as police officers and lawyers, who seek advice from 'profilers' often also have only the vaguest ideas as to what 'profiling' consists of or what scientific principles it may be based on. The army of students who aspire to emulate the fictional activities of psychologists who solve crimes is yet another group who desperately need a systematic account of what 'offender profiling' is and what the real prospects for its development are.[1]

Offender profiling has been defined in many ways by various scholars based on their backgrounds. Similarly, offender profiling is known by various names such as psychological profiling, criminal profiling, criminal investigative analysis, crime scene analysis, behavioral profiling, criminal personality profiling, sociopsychological profiling and criminological profiling. In this dissertation however, the term 'offender profiling' will be used.

[1] David Canter, Series Preface, in D. Canter, and L. Alison, (eds) Profiling in Policy and Practice, V11 (1999).

As Canter has noted, 'offender profiling' is a term coined by the FBI in the 1970's to describe their criminal investigative analysis work.[2] He maintained that "when FBI agents first began this work they invented a new term to grace their actions: *offender profiling*. By doing so they created the impression of a package, a system that was sitting waiting to be employed, rather than the mixture of craft, experience and intellectual energy that they themselves admit is at the core of their activities"[3].

Canter sees offender profiling as 'criminal shadows'. He maintained that a criminal "leaves psychological traces, tell-tale patterns of behaviour that indicate the sort of person he is. Gleaned from the crime scene and reports from witnesses, these traces are more ambigious and subtle than those examined by the biologist or physicist. They cannot be taken into a laboratory and dissected under the microscope. They are more like shadows, which undoubtedly are connected to the criminal who cast them, but they flicker and change, and it may not always be obvious where they come from. Yet, if they can be fixed and interpreted, criminal shadows can indicate where investigators should look and what sort of person they should be looking for"[4]

Canter and Heritage also maintained that "a criminal leaves evidence of his personality through his actions in relation to a crime. Any person's behaviour exhibits characteristics

[2] David Canter, *Criminal Shadows: Inside the mind of the serial killer*, 12 (1994).

[3] Id.

[4] Id.

unique to that person, as well as patterns and consistencies which are typical of the sub-group to which he or she belongs".[5]

Ainsworth defined offender profiling as "the process of using all the available information about a crime, a crime scene, and a victim, in order to compose a profile of the (as yet) unknown perpetrator"[6]. For Davies, "offender profiling (more technically known as Criminal Investigative Analysis) is the name given to a variety of techniques whereby information gathered at a crime scene, including reports of an offender's behaviour is used both to infer motivation for an offence and to produce a description of the type of person likely to be responsible."[7]

Geberth sees a criminal personality profile as "an educated attempt to provide investigative agencies with specific information as to the type of individual who may have committed a certain crime"[8]. Turvey, writing from a behavioral evidence analysis point of view, defined offender profiling as "the process of inferring the personality characteristics of individuals responsible for committing criminal acts"[9]. For Grubin, offender profiling refers to "information gathered at a crime scene, including reports of

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[5] David Canter and Rupert Heritage, "A Muiltivariate Model of Sexual Offence Behaviour: Developments in Offender Profiling", Journal of Forensic Psychiatry, (1990).

[6] Peter .B. Ainsworth, *Offender Profiling and Crime Analysis*, 7 (2001).

[7] Anne Davies, *Rapists Behaviour: A three Aspect Model as a Basis for Analysis and Identification of a Serial Crime,* Forensic Science International, 173 (1992).

[8] Vernon J. Geberth, Practical Homicide Investigations: Tactics, Procedures, and Forensic Techniques, 4th edition, 46 (1996).

[9] Brent Turvey, *Criminal Profiling: Introduction to Behavioral Evidence Analysis*, 1 (2002).

an offender's behaviour, used both to infer motivation for an offence and to produce a description of the type of person likely to be responsible"[10].

Put simply, offender profiling is a crime investigation technique whereby information gathered from the crime scene, witnesses, victims, autopsy reports and information about an offender's behavior is used to draw up a profile of the sort of person likely to commit such crime. It is a complementary technique and is usually taken up when no physical traces were left at the crime scene. Offender profiling does not point to a specific offender. It is based on the probability that someone with certain characteristics is likely to have committed a certain type of crime.

Rationale for Profiling

There are two operating words in offender profiling: *modus operandi* (method of operation) and behavior. The *modus operandi* could lead to clues about the offender. There is the idea that an offender is likely to commit a particular type of crime in a particular or similar pattern. Thus offender profiling is based on the premise that the *modus operandi* may lead to clues about the perpetrator and that the crime scene characteristics may point to the personality of the perpetrator. Behavior helps to predict the personality type or the motives for the crime. Therefore, the single most important thing that a profiler looks for at a scene of crime is anything that may point to the personality of the offender.

[10] Don Grubin, *Offender Profiling*, Journal of Forensic Psychology 259 (1995).

The rationale behind this approach is that behavior reflects personality, and by examining behavior the investigator may be able to determine what type of person is responsible for the offense.[11] When profiling, the profiler notes the physical description, individual traits, any odd behaviour and remarks or records of anything that the offender said or did during the attack. Also to be noted are information about the steps the offender used to avoid being detected, method of killing, or the way he approaches his victims, as well as notes about the offender's gender, age group, race, occupation and criminal records.[12]

The Purpose/Goals of Profiling

Offender Profiling is mainly used when the offender did not leave any physical trace at the crime scene. It is used to narrow down the suspects list. As Douglas and Olshaker have pointed out, "criminal profiling is used mostly by behavioral scientists and the police to narrow down an investigation to those who posses certain behavioral and personality features that are revealed by the way a crime was committed"[13]. Continuing, Douglas and Olshaker also maintained that "the primary goal is to aid local police in limiting and refining their suspect list so that they can direct their resources where they might do the most good".

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[11] John. E. Douglas., Ressler, R.K., Burgess, A.W., and Hartman, C.R., *Criminal Profiling from Crime Scene Analysis* .Behavioral Sciences and the Law, 403 (1986).

[12] Norbert Ebisike, *An Appraisal of Forensic Science Evidence in Criminal Proceedings*, 44 (2001).

[13] John. Douglas, J., and Olshaker, M., *Mindhunte: Inside the FBI's Elite Serial Crime Unit,* (1999).

"Another key use of a profile, is when necessary, to go proactive, which means letting the public become a partner in crime solving. The unknown suspect may have displayed some sort of odd behaviour to those close to him that will indicate his involvement with the crime. Getting the public, and hopefully those people to be aware of what they have seen, telling them to come forward may solve the case".[14]

Egger maintained that "the purpose of profiling is to develop a behavioral composite, combining sociological and psychological assessments of the offender. Profiling is generally based on the premise that an accurate analysis and interpretation of the crime scene and other locations related to the crime can indicate the type of person who committed the crime".[15] Hence, "because certain personality types exhibit similar behavioral patterns (in other words, behavior that becomes routine), knowledge and an understanding of the patterns can lead investigators to potential suspects".[16] Similarly, Jackson and Bekerian maintained that "a profile is based on the premise that the proper interpretation of crime scene evidence can indicate the personality type of the individual(s) who committed the offence. It is assumed that certain personality types exhibit similar behavioral patterns and that knowledge of these patterns can assist in the investigation of the crime and the assessment of potential suspects".[17]

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[14] Id.

[15] Steven A. Egger, Psychological Profiling: Past, Present, and Future, Journal of Contemporary Criminal Justice, vol. 15, No. 3, August 1999, 243 (1999).

[16] Id.

[17] Janet L. Jackson, and Bekerian D. A. (eds), Offender Profiling: Theory, Research and Practice, 3 (1997).

Holmes and Holmes have outlined three major goals of profiling as follows.[18]

(1) Social and psychological assessments of offenders.

This involves an evaluation of the social and psychological characteristics of the offender. In fact, "a profile should contain basic and sound information concerning the social and psychological core variables of the offender's personality, including the offender's race, age, employment status and type, religion, marital status, and level of education. This psychological information will help to focus the investigation by allowing police to narrow its range, which in turn will have a direct effect upon the number of days and weeks police must spend on the case".[19]

(2) Psychological evaluations of belongings found in the possession of suspected offenders.

This involves the evaluation of any items found at the suspect's home, such as souvenirs taken from the crime scenes, pictures, videos, books, magazines or other items that might point to the background and motives for the crimes, as well as link the suspect to the crime. Holmes and Holmes noted the case of Jerry Brudos a sadistic serial killer in the United States who had such a fetish about his victims' high heeled shoes. He took their shoes, wore and stored them at his home.[20]

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[18] Ronald. M. Holmes., and Stephen T. Holmes., *Profiling Violent Crimes: An Investigative Tool*, 3 (1996).

[19] Id.

[20] Id, at 4.

(3) Suggestions and strategies for interviewing suspected offenders when they are apprehended.

Another primary goal of profiling is to suggest the most effective interviewing strategy to be used once the offender has been arrested. As there are different types of offenders, one interviewing/interrogation strategy may not be suitable for all the different types, especially when dealing with rapists. As Holmes and Homes have pointed out, "not all people react to questions in the same fashion. For one type of offender, one strategy may be effective, but it is a mistake to assume that all those who commit similar crimes will respond to the same interviewing strategy. For example, not all serial murderers kill for the same reasons, and not all respond to the same type of interviewing strategy. Violent personal offenders also vary in their motives as well as their responses to interrogation"[21].

It has been observed that offender profiling is usually taken up late in an investigation. Offender profiling tends to be normally taken up as an alternative where DNA profiling is impossible because there were no samples left at the scene of crime.[22] There are obviously certain dangers with this approach. It is therefore suggested that in serious/major crimes, offender profiling should be used at the onset, along with the other techniques. It should not be left till later in the investigation when we have come to realize that no physical trace has been left at the crime scene, bearing in mind the issue of 'staged crime scenes'. Important details might be lost later in the investigation and as we know, crime scenes can be tampered with, by both weather conditions and human tampering.

[21] Id, at 5.

[22] Ebisike, supra note 12, at 48.

Crime Scene Staging

'Crime scene staging' occurs when the offender alters the crime scene in order to conceal the original intent. For instance, the offender may stage signs of burglary in order to conceal a homicide. Arguably, staging is mainly done by an organized offender as opposed to a disorganized offender. Hence, any evidence of staging at the crime scene may point to an organized offender. In fact, an offender stages a crime scene in order to "mislead the authorities and/or redirect the investigation. Staging is a conscious criminal action on the part of an offender to thwart an investigation"[23]. Geberth has clearly outlined three types of staging:

1. The most common type of staging occurs when the perpetrator changes elements of the scene to make the death appear to be a suicide or accident in order to cover up a murder.
2. The second most common type of staging is when the perpetrator attempts to redirect the investigation by making the crime appear to be a sex-related homicide.
3. Arson represents another type of staging. The offender purposely torches the crime scene to destroy evidence or make the death appear to be the result of an accidental fire.[24]

[23] Vernon J. Geberth, Practical Homicide Investigation: Tactics, Procedures, and Forensic Techniques, 4th edition, 22 (2006).

[24] Id, at 23.

Modus Operandi or Method of Operation (MO)

An offender's method of operation includes such things as the type of victim chosen, location of attack, time of attack, type of weapon used, as well as the method of gaining entry. The method of operation is very important in linking cases, but needs to be examined with caution.

It should be noted that the method of operation can change. In fact, as an offender commits more crime, he/she learns new ways that will help avoid detection. Hence, the method of operation can change. For instance, an offender who normally strangles the victims with bare hands may change and start strangling the victims with stockings or start suffocating the victims with pillows. Similarly, an offender may change from attacking at night to attacking during the day time, or the offender may change from choosing females to males, young victims to older victims, blacks to whites, or blondes to brunettes.

Douglas and Munn maintained that "the offender's actions during the perpetration of a crime form the MO. The offender develops and uses an MO over time because it works, but it also continually evolves. The *modus operandi* is very dynamic and malleable. During his criminal career, an offender usually modifies the MO as he gains experience. The burglar refines his breaking and entering techniques to lower his risk of apprehension and to increase his profit. Experience and confidence will reshape an offender's MO.

Incarceration usually impacts on the future MO of an offender, especially the career criminal. He refines the MO as he learns from the mistakes that led to his arrest"[25]. Furthermore, "the victim's response can also significantly influence the evolution of an MO. If the rapist has problems controlling a victim, he will modify his MO to accommodate resistance. He may bring duct tape or other ligatures, he may use a weapon, or he may blitz-attack the victim and immediately incapacitate her. If such measures are ineffective, he may resort to greater violence or kill the victim. Thus, MO will evolve to meet the demands of the crime"[26]. In fact, Turvey maintained that an offender's MO "most often serves (or fails to serve) one or more of three purposes: protects the offender's identity, ensures the successful completion of the crime and facilitates the offender's escape"[27].

Offender's Signature or Calling Card

It should be noted that modus operandi is different from the 'signature aspects', or the 'motives' of a crime. Holmes and Holmes maintained that "the signature of a perpetrator is the unique manner in which he or she commits crimes. A signature may be the manner in which the person kills, certain words a rapist uses with victims, a particular manner in

[25] John. E. Douglas, Munn, C. M., "Modus Operandi and Signature Aspects of Violent Crime, in Douglas, et al, Crime Classification Manual, 260 (2006).

[26] Id.

[27] Brent Turvey, Criminal Profiling: An Introduction to Behavioral Evidence Analysis, 151 (1999).

which a perpetrator leaves something at crime scenes, or some other indicator"[28]. Geberth also maintained that "the signature aspect of a violent crime is a unique and integral part of the offender's behavior. This signature component refers to the psychodynamics, which are the mental and emotional processes underlying human behavior and its motivations"[29]. In fact, "when an offender displays behavior within the crime scene and engages in activities which go beyond those necessary to accomplish the act, he is revealing his signature. These significant personality identifiers occur when an offender repeatedly engages in a specific order of sexual activity, uses a specific type of binding, injures and/or inflicts similar types of injuries, displays the body for shock value, tortures and mutilates his victim, and engages in some form of ritualistic behavior".[30] Geberth also noted that "one of the common signatures is that of the psychopathic sexual sadist, who involves himself in complete domination of the victim".[31]

The signature aspects of a crime, which can also be called the 'mark' of the perpetrator, is an element in an offender's behavior which in most cases may always be present, and recognizable at the scene of crime, but it can change. It is the overriding psychological need of an offender. It is what drives a killer to engage in an attack and the particular method of carrying out that attack. Signature aspects of a crime reveal the deep emotional needs that have to happen in order for the offender to fulfill his or her fantasy. Put simply, the signature aspect of a crime refers to the specific thing(s) that an offender tend

[28] Holmes and Holmes, supra note 18, at 42.

[29] Vernon J. Geberth, "The Signature Aspect in Criminal Investigations", Law and Order Magazine, 43 (11) November 1995.

[30] Geberth, supra note 23, at 824.

[31] Id.

to do at the crime scene. It could be cutting off a specific part of the victim's body and taking it as a souvenir, cutting the victims throats, or putting the victims inside the bathe tub after killing them, and so on. Hence, signature can be described as the 'mark' of a killer, which may distinguish one killer from another. It should be noted however that there are various things that can affect signature. Therefore, signatures are not a conclusive or a reliable indicator that a particular offender carried out a particular attack. Offenders learn from other offenders, from television crime series, from their experience, develop new fantasies and they also read/learn from books on crime investigations and forensic science, and so their signature may change. Geberth will probably support this view, and he wrote: "the 'signature' component may also change to some degree. However, the change usually involves a progression of violence and sexual mutilation, which is consistent with the paraphilia sexual sadism seen in lust murders"[32]. The point however, remains that signatures may change.

Motives of a Crime

The motive of a crime refers to the reason why the offender committed the crime. Motive deals with the primary reason why a particular crime was committed. It is one of the identifying elements at a crime scene. An offender can have different motives for

[32] Id, at 822.

different crimes. Turvey observed that "an offender's motives are evidenced by signature behaviors that suggest overall signature aspects, or motivational aspects of a crime".[33]

Linkage Analysis

Linkage analysis refers to the method whereby behavioral patterns, wound patterns, crime scene characteristics, victimology and other aspects of two or more crimes committed at different crime scenes are examined in an attempt to ascertain whether the crimes were committed by one offender. Linkage analysis has faced a lot of criticism. Professor Risinger and Loop, for instance, argued that linkage analysis "appears to have been developed, not as an investigatory aid, but primarily as a means of obtaining either the admission of other crimes evidence which might not otherwise be admitted, or a means to convince the jury that the other crimes evidence was more meaningful than they otherwise might believe, or both. In sum, it was not a way to identify unknown perpetrators, but a tool to help build a case against defendants already believed to be guilty".[34]

[33] Turvey, supra note 27, at 153.

[34] Michael D. Risinger and Jeffrey L. Loop, "Three Card Monte, Monty Hall, Modus Operandi and "Offender Profiling": Some Lessons of Modern Cognitive Science for the Law of Evidence", 24 Cardozo Law Review, 193, 254, (November 2002).

Types of Crime Suitable for Profiling

It has been recognized that not all types of crime are suitable for profiling. In fact, there is general agreement that crimes most suitable for profiling are:

1. crimes where the perpetrator showed elements of psychopathology.
2. crimes believed to be part of a series.
3. violent crimes.
4. attacks on strangers.
5. contact crimes - crimes where the offender engaged in long conversations and communications with the victim.

Serial murders, serial rapes, sexual homicides, ritual crimes, arson, and hostage taking have been seen to be very suitable for profiling. Research by Holmes and Holmes have shown that the types of crimes most suitable for profiling include sadistic torture in sexual assaults, evisceration, postmortem slashing and cutting, motiveless fire setting, lust and mutilation murder, rape, satanic and ritualistic crime and pedophilia."[35] It has also been noted that "cases involving mere destruction of property, assault, or murder during the commission of a robbery are generally unsuitable for profiling, since the personality of the criminal is not generally revealed in such crime scenes. Likewise drug induced crimes lend themselves poorly to profiling because the true personality of the perpetrator is often altered"[36].

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[35] Holmes and Holmes, supra note 18, at 2.

[36] McCann, J. T., *Criminal Personality Profiling in the Investigation of Violent Crime: Recent Advances and Future Directions*, Behavioral Sciences and the Law, vol. 10, 476 (1992).

'Contact crimes' are suitable for profiling. In fact, "these 'contact crimes' are believed to be the ones in which aspects of an offender's underlying personality and motivations are most likely to be revealed by the way in which an offence or series of offences has been carried out".[37] Schurman-Kauflin noted that "serial killers are the most frustrating and disturbing of all violent predators, but they are the most profilable. Why? When they kill, they are filling complex psychological needs. Sometimes, they may steal when they kill, but from my experience of studying serial predators for twenty years and interviewing over twenty five of them, their motivations are in their heads, not their wallets. Because they kill for psychological reasons, many times, they leave a lot of clues for profilers".[38] Geberth also maintained that "practically speaking, in any crime in which available evidence indicates a mental, emotional, or personality aberration by an unknown perpetrator, the criminal personality profile can be instrumental in providing the investigator with information that narrows down the leads. The behavioral characteristics of the perpetrator as evidenced in the crime scene – not the offense per se – determine the degree of suitability of the case for profiling"[39].

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[37] Ainsworth, supra note 6, at 9.

[38] Deborah Schurman-Kauflin, Vulture: Profiling Sadistic Serial Killers, 10 (2005).

[39] Geberth, supra note 23, at 774.

History and Development of Offender Profiling

Offender Profiling goes as far back as 1876 when the Italian Criminologist, Physician and Psychiatrist, Cesaro Lombroso (Nov. 6, 1835 – Oct. 19, 1909), published his work "L'Uomo Delinquente" (The Criminal Man), in which he argued that there are certain physical characteristics that are indicative of a born criminal. He maintained that by comparing information about similar offenders like race, age, sex, physical characteristics, education and geographic location, that the origins and motivations of criminal behavior could be better understood and subsequently predicted. Lombroso, basing his ideas on Darwin's theory of evolution, maintained that there are six types of criminals, the born criminal, the insane criminal, the criminal by passion, the habitual criminal, the occasional criminal and the criminaloid.

Lombroso had the idea that there is a born criminal and argued that criminality is inherited and could be identified by physical defects. For him, criminals have certain physiognomic deformities. He saw criminals as savage and atavistic. In his theory of atavism, he measured the heads of living and executed criminals against the skulls of apes and prehistoric humans and came up with the idea that criminals were victims of atavism. He maintained that 'born criminals' have the following physical characteristics/deformities:

- Deviation in head size and shape from type common to race and region from which the criminal came.
- Asymmetry of the face.

- Eye defects and peculiarities.
- Excessive dimensions of the jaws and cheek bones.
- Ears of unusual size, or occasionally very small, or standing out from the head as do those of the chimpanzee.
- Nose twisted, upturned, or flattened in thieves, or aquiline or beak-like in murderers, or with a tip rising like a peak from swollen nostrils.
- Lips fleshy, swollen, and protruding.
- Pouches in the cheek like those of some animals.
- Peculiarities of the palate, such as are found in some reptiles, and cleft palate.
- Chin receding, or excessively long, or short and flat, as in apes.
- Abnormal dentition.
- Abundance, variety, and precocity of wrinkles.
- Anomalies of the hair, marked by characteristics of the hair of the opposite sex.
- Defects of the thorax, such as too many or too few ribs, or supernumerary nipples.
- Inversion of sex characters in the pelvic organs.
- Excessive length of arms.
- Supernumerary fingers and toes.
- Imbalance of the hemispheres of the brain (asymmetry of cranium).

Lombroso maintained that the insane criminals were the type of criminals who suffered from mental illnesses and also had some physical deformities. The habitual criminals according to Lombroso are those who commit crimes as a result of poor socialization. The occasional criminals commit crimes to protect family honor and as self-defence. The

criminaloids are those who commit crimes when the opportunities arise in their environment. Lombroso maintained that criminaloids are usually left-handed, which he said was common among swindlers, are also characterized by early baldness and grayness, insensitivity to pain and that a large number of them abuse alcohol.

Lombroso believed that the study of individuals should involve the utilization of measurements and statistical methods in compiling anthropological, social and economic data. He was against capital punishment and argued in favor of rehabilitation. He also contended that there should be humane treatment for criminals because their criminality is inherited.

Lombroso's views were undoubtedly criticized. The greatest criticism came from Charles Goring an Englishman, who carried out a study of 3,000 English convicts and compared them with groups of university students, hospital patients and British solders. Using statistical methodology, Goring compared measurements of thirty seven specific physical characteristics of the groups and observed that "in fact, both with regard to measurements and the presence of physical anomalies in criminals, our statistics present a startling conformity with similar statistics of the law-abiding classes. Our inevitable conclusion must be that there is no such thing as a physical criminal type"[40].

Goring also noted that "all English criminals, with the exception of those technically convicted of fraud, are markedly differentiated from the general population in stature and body-weight; in addition, offenders convicted of violence to the person are characterized

[40] Charles Goring, The English Convict: A Statistical Study, 174 (1913).

by an average degree of strength and of constitutional soundness considerably above the average of other criminals and of the law-abiding community: finally, thieves and burglars (who constitute, it must be borne in mind, 90 percent of all criminals) and also incendiaries, as well as being inferior in stature and weight, are also, relatively to other criminals and the populations at large, puny in their general bodily habit". Goring also observed some differences between criminals and non criminals in terms of sexual profligacy, alcoholism, and epilepsy, and he concluded that "the one vital mental constitutional factor in the etiology of crime is defective intelligence".

Goring's views also met severe criticisms. Hagan argued that "while Goring refuted Lombroso's notion of physical differences, his own methodology was critically flawed. Eschewing the then-available Simon-Binet tests of mental ability, he used his own impressions in order to operationalize the mental ability of his subjects. The nail in the coffin of Goring's theory was the advent of wide-scale mental testing of US military conscriptees during World War 1. Using Goring's definitions of feeblemindedness, nearly one-third of the draftees would have been so classified; the standards for such tests were modified as a result. Other studies comparing mental age found no difference in performance by prisoners and the draft army, and one even found that the former performed better. As a result, the notion of feeblemindedness as a cause of criminal behavior was interred in the graveyard of outmoded criminological concepts"[41].

Similarly, Sutherland and Cressey argued that Goring's study did not include women. That Goring saw crime as a male disposition. They also argued that Goring "considered

[41] Frank E. Hagan, Introduction to Criminology, 3rd edition, 143 (1994).

only few environmental factors, as opposed to many that exist", and finally that Goring did not consider a wide range of offenses in his study.

It should be noted at this point that two of Lombroso's students – Enrico Ferri (1856 – 1929) and Raffaelo Garofalo (1852 – 1934), later took a different approach to the explanations of criminal behavior. For instance, Garofalo in this theory of moral degeneration, maintained that degeneration resulted from retrogressive selection and caused the individual "to lose the better qualities which he had acquired by secular evolution, and has led him back to the same degree of inferiority whence he had slowly risen. This retrogressive selection is due to the mating of weakest and most unfit, of those who have become brutalized by alcohol or abased by extreme misery against which apathy has prevented them from struggling. Thus are formed demoralized and outcast families whose interbreeding in time produces a true face of inferior quality".[42]

Following the criticisms of his work and after further research, Lombroso later revised his work and admitted that social, economic and environmental factors also played significant roles in criminal behavior. He however, still maintained that at least 40 percent of criminality is a result of biological heredity. Nevertheless, Lombroso's early explanation of criminality, using measurements is undoubtedly the beginning of the attempts to find a scientific basis to the idea of predicting crimes and criminals.

[42] Baron R. Garofalo, Criminology, trans. 110 (1914).

Following the work of Goring, Earnest Hooton, an American anthropologist, in 1939, carried out a study of 13,873 male criminals in 10 states and compared it with a civilian group of 3,023 and found out that "criminals are organically inferior. Crime is the resultant of the impact of environment upon low grade human organisms. To eliminate crime, the physically, mentally, and morally unfit must be exterminated or segregated completely in a "socially aseptic environment".[43]

Hooton claimed that certain morphological characteristics were more common in criminals than among civilians. These characteristics include thin lips, straight hair, thin beards and body hair, thick head hair, long thin necks, sloping shoulders, low and sloping foreheads, compressed jaw angles, blue-gray and mixed eyes, protruding and small ears, tattooing, and nasal bridges and tips varying to both extremes of breath and narrowness.[44] Hooton also believed that criminals were inferior to non criminals, and that inferiority could be explained by heredity, arguing that physical inferiority indicates mental inferiority. Furthermore, Hooton claimed that murderers and robbers tend to be tall and thin; burglars and thieves tend to be undersized and that short and heavily built men tend to be involved in sexual offenses and assaults.

Hooton's arguments were seen as fundamentally flawed. Vold, for instance, argued that Hooton "ignored the fact that more than half of his prisoners had served previous terms and a very large proportion of these previous sentences had been for crimes different

[43] Earnest A. Hooton, The American Criminal: An Anthropological Study, vol.1, 309 (1939).

[44] Earnest A. Hooton, Crime and Man, 301 (1939).

from the offense of the current term."[45] Johnson also contended that "in using prisoners to represent criminals, Hooton ignored the effects of the differential selection of prisoners from the total body of offenders that the system of criminal justice makes according to factors extraneous to criminal behavior. Hooton's control group was too small and included firemen and militiamen who had been accepted for these occupations after passing a physical examination, thus exaggerating physical differences between offenders and nonoffenders"[46].

Dr. Hans Gross, an Austrian judge and criminologist also made very important contributions towards the attempts to explain criminality and the prediction of criminals. In fact, he is widely regarded as the first person to write about offender profiling per se. In 1893 he published his work "Criminal Investigation: A Practical Textbook for Magistrates, Police Officers, and Lawyers", in which he maintained that criminals can be better understood by studying their crimes. Gross argued that "in nearly every case the thief has left the most important trace of his passage, namely the manner in which he has committed the theft. Every thief has in fact a characteristic style or modus operandi which he rarely departs from, and which he is incapable of completely getting rid of; at times this distinctive feature is so visible and so striking that even the novice can spot it without difficulty; but on the one hand the novice does not know how to group,

[45] George B. Vold, Theoretical Criminology, 62 (1958).

[46] Elmer H. Johnson, Crime, Correction, and Society, 211 (1974).

differentiate or utilize what he has observed, and on the other hand the particular character of the procedure is not always so easy to recognize".[47]

Gross also maintained that by examining the character and beliefs of an offender that we can know more about the offender's criminal actions, and he wrote:

> Is it not known that every deed is an outcome of the total character of the doer? Is it not considered that the deed and the character are correlative concepts, and that the character by means of which the deed is to be established cannot be inferred from the deed alone? Each particular deed is thinkable only when a determinate character of the doer is brought in relation with it – a certain character predisposes to determinate deeds, another character makes them unthinkable and unrelatable with this or that person.[48]

In 1888 there were several murder cases in the Whitechapel area of East London, England. In fact, between August 31st and November 9th 1888, five female prostitutes were murdered, and the police had no clues as to the identity of the killer. On August 31, 1888 Mary Ann Nichols was found brutally murdered. This was followed by the discovery of the viciously mutilated body of Annie Chapman on September 8, 1888. On September 30, 1888 was the discovery of the double murder of Elizabeth Stride and Catherine Eddowes. On November 9, 1888 another murder occurred and this time Mary Jane Kelly was brutally murdered. At this point Dr. Thomas Bond, a police surgeon was asked to perform an autopsy on Mary Jane Kelly. The killer after strangling the women, will cut their throat and then remove some of their internal organs. This prompted the

[47] Hans Gross, Criminal Investigation, 478 (1924).

[48] Hans Gross, Criminal Psychology, 55 (1934).

police to think that the killer may be somebody with anatomical or surgical knowledge like a surgeon or a butcher.

Hence, Dr Bond was also instructed to give an opinion on this issue. After the autopsy on Mary Jane Kelly, Dr. Bond also studied the medical reports of the other victims as well as the police reports, and he decided to do a crime scene reconstruction to see if he could find any behavioral patterns that could lead investigators to the possible killer. He believed that the mutilations of the five victims suggested that one person was responsible for the five murders. Above all, all the five murders shared similar characteristics. All the victims were left in open places, where their bodies were found soon after they were killed, all the victims were women and prostitutes, all the victims were viciously mutilated and internal organs removed from their body.

Dr. Bond produced a report/profile which he sent to the head of the Criminal Investigation Division, London. In his report/profile, Dr. Bond wrote that:

> The murderer must have been a man of great physical strength and of great coolness and daring. There is no evidence that he had an accomplice. He must in my opinion be a man subject to periodical attacks of Homicidal and Erotic mania. The character of the mutilations indicate that the man may be in a condition sexually, that may be called Satyriasis. It is of course possible that the Homicidal impulse may have developed from a revengeful or brooding condition of the mind, or that religious mania may have been the original disease but I do not think either hypothesis is likely. The murderer in external appearance is quite likely to be quiet inoffensive looking man probably middle-aged and neatly and respectably dressed. I think he must be in the habit of wearing a cloak or overcoat or he could hardly have escaped notice in the streets if the blood on his hands and clothes were visible.

> Assuming the murderer to be such a person as I have just described, he would be solitary and eccentric in his habits, also he is most likely to be a man without regular occupation, but with some small income or pension. He is possibly living among respectable persons who have some knowledge of his character and habits and who may have grounds for suspicion that he isn't quite right in his mind at times. Such persons would probably be unwilling to communicate suspicions to the police for fear of trouble or notoriety, whereas if there were prospects of reward it might overcome their scruples.[49]

It should be noted that the unknown killer was referred to as the "Leather Apron" killer, but in a letter he sent to the police he called himself "Jack the Ripper". As at today, the identity of this killer is still a mystery. Hence, the five murders still remain unsolved. Therefore, the accuracy or usefulness of Dr. Bond's profile/report cannot be evaluated. However, his efforts constitute another major contribution towards the history and development of offender profiling.

In 1943 the US Office of Strategic Services (OSS) asked Dr. Walter C. Langer, a psychiatrist based in New York to produce a psychological profile of Adolf Hitler. This was for military intelligence purpose, and not for criminal investigation. The OSS was the arm of the US Army responsible for gathering intelligence.[50] The OSS wanted a personality profile of Hitler so that they will know the best interrogative strategy/technique to be used if he was captured. Dr. Langer studied and analyzed the speeches made by Hitler, studied Hitler's book – Mein Kampf, and interviewed those who knew Hitler and he came up with a psychodynamic personality profile. Dr. Langer stated that he was asked by the OSS to provide "a realistic appraisal of the German

[49] Donald Rumbelow, The Complete Jack the Ripper, 138 (1975).

[50] The CIA took over this intelligence in 1945 when the OSS was disbanded.

situation. If Hitler is running the show, what kind of person is he? What are his ambitions? We want to know about his psychological makeup – the things that make him tick. In addition, we ought to know what he might do if things begin to go against him."[51]

Dr. Langer predicted that:

- Hitler may die of natural causes – deemed to be a remote possibility, as he was in good health aside from a stomach ailment, probably linked to a psychosomatic disturbance.
- Hitler might seek refuge in a neutral country – unlikely, as it would cast doubt on his myth of immortality if he fled at the critical moment.
- Hitler might get killed in battle – a possibility, as he might desire to cast himself as a fearless leader, and his death might have the adverse effect of binding the German people to his legend.
- Hitler might be assassinated – another plausible outcome, which he himself speculated over.
- Hitler might go insane – he was believed to exhibit many characteristics of a borderline schizophrenic, and if faced with defeat, it was likely his psychological constitution would collapse.
- German military might revolt and seize him – an unlikely event because of the unique position he enjoyed in the eyes of the German people, but he might be confined in secret should he become unstable.

[51] Walter C. Langer, The Mind of Adolf Hitler: The Secret Wartime Report, 19 (1972).

- Hitler might fall into Allied hands – the most unlikely eventuality as this would be the scenario he personally would do his utmost to avoid.
- Hitler might commit suicide – the most conceivable conclusion due to his inordinate fear of death, which he had already envisaged, stating "Yes, in the hour of supreme peril I must sacrifice myself for the people"[52].

Dr. Langer's profile was seen to be correct, as Hitler committed suicide in a bunker when he found out that the Allies were winning. Langer's work and contribution has been well received by many scholars. Holmes and Holmes maintained that:

> Despite its Freudian psychoanalytic orientation, Langer's profile proved to be amazingly accurate as far as the scenarios for the war's end were concerned. Hitler did commit suicide in a bunker with Eva Braun. He never married, perhaps because he never found anyone he felt was enough like his mother. Hitler's writings from the time near the end of the war indicate that he appeared to be on the fringe of mental illness. He also left many documents that pointed toward some unusual sexual leanings: coprolagnia and urolagnia (sexual excitement gained from eating feces and drinking urine) and others. Langer's work was not in vain. It proved to be a worthy attempt at the use of profiling as a tool to understand an aberrant personality.[53]

Commenting also on the work of Dr. Langer, Norris maintained that "although Langer details each circumstance and its likelihood of occurrence, perusal of the document indicates the tenuos nature of the profile in general. Although there is some level of psychiatric assessment – for example, describing Hitler as a borderline schizophrenic or a hysteric – significant interpretation of his actual behavior relies on Hitler's own

[52] Id, at 10.

[53] Holmes and Holmes, supra note 18, at 19.

assertions, gleaned primarily from his writings and speeches. Nevertheless, Langer was to pave the way for others to analyze unknown individuals based on their observable behavior"[54].

In 1949 William H. Sheldon, a psychologist came up with his "Somatotype" theory in which he argued that physique or body type is related to certain temperaments. During an eight year period, Sheldon tested his theory on delinquent boys and normal college students and found out that there is a link between the mesomorphic body type and crime, which explained why some juveniles are delinquent. His three body types are as follows.

(1) Endomorphs: These are individuals who he said are soft, round/fat physiques, and plump.

(2) Mesomorphs: This people are muscular, hard, with heavy chest and heavy bones.

(3) Ectomorphs: These are people who are thin/lean, fragile, with droopy shoulders and small faces.

Sheldon's three temperaments are as follows:

(1) Viscerotonia – the individuals with this type of temperament tend to be relaxed, comfort-loving, greedy for affection and approval, slow in reaction, even in emotions, and tolerant.

(2) Somatotonia – this type of temperament is associated with individuals who are assertive, adventure-loving, psychologically callous, energetic, compulsive, and ruthless.

[54] Gareth Norris, "Criminal Profiling: A Continuing History" in Wayne Petherick (ed) Serial Crime: Theoretical and Practical Issues in Behavioral Profiling, 3 (2006).

(3) Cerebrotonia – individuals with this type of temperament are tight in posture, physiologically overresponsive, emotionally restrained, unpredictable in attitude and mentally overintense.

For Sheldon, endomorphs tend to have viscerotonia temperaments, mesomorphs tend to be somatotonic and ectomorphs have cerebrotonia type of temperament. In his study of 200 delinquent boys (aged 15 – 21) in a rehabilitation center, he found out that delinquent youths tend to be mesomorphs. Sheldon used statistical correlations and ranked individuals on a subject scale of 1 to 7 to indicate the predominant temperament in each individual. Using what he called an "Index of Delinquency" or "Index of Disappointingness", Sheldon tried to provide a quantitative account of an individual's psychiatric problems, residual delinquency, as well as shortcomings in IQ insufficiency. He concluded that delinquents are mainly mesomorphs.

As we have seen, Sheldon made a great contribution towards the attempts to predict criminals and criminal behavior. In fact, his study was later supported by Sheldon and Eleanor Gluecks. In 1956, the Gluecks, using Sheldon's somatotype system, studied 500 boys considered to be persistently delinquent and compared them to 500 non-delinquent boys in Boston public schools, Massachusetts, and they also found out that mesomorphic boys have higher delinquency level/potential than the other body types.

The studies by Sheldon and the Gluecks were undoubtedly criticized. Indeed, "the studies have been criticized for inadequate sampling and their misuse of control groups. Ideally,

the offenders studied should represent all criminals, and the subjects in the control groups should represent all noncriminals. Thereby, differences found between the two samples would be applicable to the respective populations they were supposed to represent".[55]

In 1955, Ernst Kretschmer (1888 – 1964), a German Criminologist, came up with a body types theory in which he argued that there is a high degree of correlation between body types, personality types and criminal potential. Kretschmer studied 260 insane people in Swabia (a southwestern German town), and in his work "Physique and Character", he contended that there are four body types and that each is linked to a person's personality, character and criminal potential. His four body types are as follows.

(1) Leptosome or Asthenic: Tall and thin, and mainly involved in fraud and thievery. He said that schizophrenics fall into this group.

(2) Athletic: Very muscular, flat stomachs, and usually involved in violent crimes.

(3) Pyknic: Short, fat, broad faces, and usually involved in fraud, deception and sometimes violent crimes, and that manic depressives fall into this category.

(4) Dysplastic or Mixed: These are individuals who fit into more than one body type and they are generally involved in some violent crimes and indecency. Generally, these individuals are very emotional, lack self control and mostly involved in sexual offenses and crimes of passion.

Kretschmer's work attracted a lot of criticisms. "Kretschmer's theories, however, were viewed as extremely dubious because he never disclosed his research, his inferences and

[55] Johnson, supra note 45 at 211.

descriptions were always incredibly vague, and no specific comparisons were performed with non-criminals populations. In short, he would not submit his findings for any form of peer review, and his approach was clearly non-scientific. As a result, many argued that his theories regarding his findings were nothing more than unfounded inference and correction masquerading as science"[56].

Dr. James Brussel, an American Psychiatrist, is arguably the father of modern offender profiling. In 1956, Dr. Brussel who was in private practice and was also the Assistant Commissioner of Mental Hygiene for the state of New York was approached by police investigators to help them with the investigation of series of bomb explosions in New York City. It should also be noted that Dr. Brussel was the Chief of Neuropsychiatry in the US Millitary (at Fort Dix) prior to going into private practice. Later he was the head of US army neuropsychiatry during the Korean war.

In 1956, Brussel compiled a psychological profile which led to the identification and arrest of George Metesky (known as the New York Mad Bomber) who caused thirty–two explosions in New York City between 1940 and 1956. Using crime scene information, Brussel was able to make psychodynamic inferences. He studied the crime scene photos and the letters that the bomber wrote and he produced a profile of the likely offender.

[56] Turvey, supra note 27, at 4.

In his psychological profile, Dr. Brussel urged the investigators to "look for a heavy man. Middle-aged. Foreign born. Roman Catholic. Single. Lives with a brother or sister".[57] He also stated that "when you find him, chances are he'll be wearing a double-breasted suit. Buttoned".[58] In general, Brussel's profile also asked the police to look for:

> Single man, between 40 and 50 years, introvert. Unsocial but not antisocial. Skilled mechanic. Cunning. Neat with tools. Egostical of mechanical skill. Contemptuous of other people. Resentful of criticism of his work but probably conceals resentment. Moral. Honest. Not interested in women. High school graduate. Expert in civil or military ordinance. Religious. Might flare up violently at work when criticized. Possible motive: discharge or reprimand. Feels superior to critics. Resentment, keeps growing. Present or former Consolidated Edison worker. Probably case of progressive paranoia.[59]

Dr. Brussel's profile proved to be accurate. Metesky was a former employee of Consolidated Edison, and most interesting of all, when the police went to arrest him at his house, they asked him to get changed and he came out dressed in a double-breasted suit, just like Brussel predicted. Metesky confessed to having committed the crimes.

Dr. Brussel was also asked by the police to help them in the case of the "Boston Strangler". In Boston, Massachusetts, between June 1962 and January 1964, thirteen sexually motivated murders occurred and the police had no suspects. In what became known as the 'Boston Strangler' case, Dr. Brussel was asked to produce a psychological profile of the likely offender. Initially, the investigators believed that the murders were

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[57] James A. Brussel, Casebook of a Crime Psychiatrist, 1X (1968).

[58] Id.

[59] Id, at 47.

committed by two killers. This was based on the fact that the victims were of two age groups - young women and older women. Dr Brussel believed that only one person was responsible for the thirteen murders, and he produced a profile. Albert DeSalvo was arrested in November 1964 in connection with another rape and murder known as the "Green Man Sex Crimes". He fitted the profile drawn up by Brussel. He was detained and he later confessed to his psychiatrist that he was the 'Boston Strangler'. While in person, awaiting trial for the other murders, DeSalvo was stabbed to death by a fellow inmate. Hence, he was not tried for the 'Boston Strangler's murders. Therefore, the accuracy or otherwise of Dr. Brussel's profile cannot be evaluated on this case.

Suffice it to say however, that Brussel used his practical psychiatric knowledge/experience, personal intuition and police and medical records to come up with the profiles. Such approach is therefore subjective and should be used with caution. In fact, Brussel admitted that he made mistakes in some of his cases, and he wrote: "The only thing that I have done to get my name in the papers has been to apply some common psychiatric principles in reverse, using my own private blend of science, intuition, and hope. With this approach, I've been able to help the police solve some bizarre criminal cases and I've been summoned as an expert witness in some famous criminal trials".[60]

Furthermore, Brussel maintained that, "I haven't chosen the cases to show what a clever fellow I am. I made mistakes in some of them, as I will admit. I analyzed facts incorrectly or incompletely, I made deductions I had no right to make. Some of the cases earned me

[60] Id, at 3.

accolades, but others did not. In one of them, the police and courts didn't even listen to me. In another, the major questions were not answered and the persons will never be caught"[61]

Following the work of Dr. Brussel, the FBI in the 1970's started to expand on offender profiling and they established the Behavioral Science Unit at the FBI training academy in Quantico, Virginia in 1974, with the aim of studying serial rape and homicide cases. Howard Teten and Pat Mullany were the first instructors at this unit. However, in 1975, Robert Ressler, Dick Ault and John Douglas joined and expanded the unit. It should be noted that in 1983 Pierce Brooks founded the FBI's VICAP (computer reporting system) and the unit was made up of Anna Boudea, Ken Handfland, David Icove and Jim Howlett. In 1984, the NCAVC (National Center for the Analysis of Violent Crimes) was created. This unit was charged with the responsibility of identifying and tracking serial killers.

During the 1970's there were several murder cases that the FBI were unable to solve. They became increasingly frustrated with the fact that physical evidence even when present at the scene of crime could not provide clues as to the sort of person they should be looking for. The FBI needed a technique that would help them focus on the most likely offenders rather than focusing on a large number of suspects. The FBI conducted indepth interviews with thirty six convicted serial killers and found that their crimes were all almost sexually motivated. Their main aim of carrying out the interviews was to identify the personality and behavioral characteristics of these offenders.

[61] Id, at 4.

Following the interviews, the FBI then came up with the idea of organized and disorganized offenders.[62] As Ainsworth has pointed out:

> The FBI believed that this classification into organized and disorganized murders was helpful as they claimed that the two different types of offenders typically had very different personality and demographic characteristics. In the case of organized murderers, a typical offender would be intelligent (but possibly an underachiever), socially skilled, sexually competent, and be living with a partner. This mask of 'normality' however often hid an antisocial or psychopathic personality. Such an individual may have been experiencing a great deal of anger around the time of the attack and have been suffering from depression. He would also be likely to follow news reports about his offence and to leave the area following the attack.[63]

Ainsworth further argued that "such characteristics are in sharp contrast to the disorganized murderer who is more likely to live alone and quite near the scene of the attack. He would be socially and sexually inept, of low intelligence and to have had some quite severe form of mental illness. He was also likely to have suffered physical and sexual abuse as a child. In the case of these disorganized offenders, the offence would tend to be committed when in a frightened or confused state"[64].

The first case in which the FBI used offender profiling occurred in June 1973 when a seven year old girl, Susan Jaegar went missing while on a camping holiday with her parents. She was abducted from her tent while her parents were sleeping. For a year, the Montana Police could not find the missing girl. Then in January 1974, police discovered

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[62] This has been discussed in more details in chapter 2 under the CSA/FBI approach to offender profiling.

[63] Ainsworth, supra note 6, at 101.

[64] Id.

the charred body of an eighteen year old girl in the woodland near the camp where Susan Jaegar was abducted. Police suspected that one killer was responsible for both murders and they decided to call in the FBI to assist them with the investigation. The FBI drew up a profile of the likely killer, which among other things stated that :-

(1) the offender was a young white male.

(2) A loner.

(3) Lived near the camp.

(4) Likely to have been arrested before.

(5) Likely to have kept souvenir from the victims.

Their profile fitted David Meirhofer who was already on the FBI suspects list. He was named by an informant. He was arrested, questioned but released as there was no physical evidence linking him to the murders. As part of their investigation, the FBI kept a telephone recorder at Susan Jaeger's mother's house. ...as predicted, an anonymous caller telephoned and said that he has abducted Susan, her mother was able to record his voice. It was identified as that of Meirhofer. A search of his home revealed the gruesome body parts, kept as 'souvenirs'. He later admitted to both murders as well as two others of local boys, before hanging himself in his cell.[65]

It should be noted that the FBI in the 1970's carried out another interview with 41 convicted serial rapists and they came up with four types of rapists – power reassurance, power assertive, anger-retaliatory and anger excitation. These initial groupings of

[65] Canter, supra note 2, at 14.

murderers and rapists eventually led to the development of the Crime Classification Manual (Ressler, Douglas, Burgess and Burgess). This is a classification system for the types of crimes in which the behaviour of the perpetrator plays an important role.[66]

In Britain, on the other hand, Paul Britton, a British criminal psychologist was approached by the police in 1984 to assist them with the case of a 33 year old woman – Caroline Osborne, from Leicesterhire, England. Caroline's body was found with seven stab wounds and her hands and feet were bound with string. There were no signs of robbery or sexual assault. It should be noted that a piece of paper containing a drawing of a pentagram in a circle was found at the crime scene. This image is usually linked to black magic or satanism. In order to draw up a profile of the likely killer, Britton studied the crime scene photographs and autopsy reports and he predicted that the killer was :-

(1) Male in his mid-teens to early twenties.

(2) Sexually immature.

(3) Lacked social skills to maintain relationships.

(4) Lived at home with both parents or one parent.

(5) Likes to keep to himself.

(6) Probably lives near the area where the body was found.

(7) Was a manual worker.

(8) Strong and athletic build.

(9) Had forensic awareness or kept souvenirs.

[66] Jackson and Bekerian, supra note 17, at 5.

Another murder occurred fourteen months later in the area, with similar patterns and Britton was called in again to assist with the investigation. Britton said that even though there were a few differences in the two murders that they were committed by the same person. Following Britton's profile, Paul Kenneth Bostock was arrested. Britton suggested to the police the interviewing strategies to be used and Bostock later confessed to the two murders. In June 1986 he was sentenced to life imprisonment by the Leicester Crown Court. Britton believed that there were sexual motives for the murders and he wrote: "Caroline Osborne's murder was an expression of a corrupt lust. The bindings, control and choice of victim suggested a killer whose sexual desire had become mixed with anger and the need to dominate. He would have rehearsed the scene in his mind beforehand – fantasizing about a woman being taken, restrained, bound, dominated, mutilated and killed with a knife".[67]

Paul Britton was also involved in the controversial case of Rachel Nickell, a twenty year old model who was murdered on July 15, 1992 on Wimbledon Common, London, while walking her dog with her two year old son. Following the initial investigation, police had a suspect Colin Stagg, but he was released because there was no physical evidence to charge him. The police, on the advice of Paul Britton decided to organize a sting operation whereby an undercover policewoman codenamed Lizzie James would begin a relationship with the suspect. The aim of the operation was to link their suspect to the crime. Lizzie James started to exchange letters with Colin Stagg and swapped sexual fantasies. Britton's idea was to see if the suspect would implicate himself. Hence, through letters, meetings and telephone calls over seven month undercover operation, Lizzie

[67] Paul Britton, *The Jigsaw Man*, 49 (1997).

James encouraged Colin Stagg to develop his fantasies that matched the profile characteristics drawn up by Paul Britton. It should be noted that Colin's replies to the letters written to him by Lizzie James led to him being charged with the murder of Rachel Nickell. In one of their meetings, Lizzie told Colin that she enjoyed hurting people and always "wants blood, buckets of it". She also described to Colin how in her teenage years she was involved in satanism and had murdered a mother and her baby. She told Colin that she was looking for a meaningful and long lasting relationship with a man with similar experience and desires. In order to impress Lizzie and carry on with their relationship, Colin told her that he murdered a woman in New Forest. Police records and investigations showed that there was no such murder and that Colin lied to impress Lizzie. Britton at this point advised Lizzie to go back to Colin and tell him that she does not believe the New Forest story and that "if only you had done the Wimbledon Common murder; if only you had killed her, it would be all right". Colin told her that he was not involved in that murder, yet because he fitted some of the characteristics in the profile drawn up by Britton, he was charged with the murder.

During the trial the defense argued that the undercover police operation was unfair and constitutes a breach of a defendant's right not to incriminate himself. Gisli Gudjonsson, a psychologist representing the accused, argued that Britton's profile was mere speculation and based only on his own personal intuition. It was also argued that the offender profiling used is an unreliable technique that had not achieved general acceptance as a science.

On September 14, 1994, Mr. Justice Ognall acquitted Colin Stagg of the murder. The judge was very critical of the seven month undercover police operation and the role of Paul Britton in the case. The judge ruled that the whole operation was unfair, a breach of a defendant's right not to incriminate himself and was "misconceived", and he said: "I am afraid this behaviour betrays not merely an excess of zeal, but a blatant attempt to incriminate a suspect by positive and deceptive conduct of the grossest kind. Any legitimate steps taken by the police and the prosecuting authorities to bring perpetrators to justice are to be applauded, but the emphasis must be on the word legitimate. A careful appraisal of the material demonstrates a skilful and sustained enterprise to manipulate the accused, sometimes subtly, sometimes blatantly".

It should be noted that because of his role in this case, Paul Britton faced charges of professional misconduct by the British Psychological Society. However, the Disciplinary Committee of the society met on October 29 and 30, 2002 and dismissed the charges. The committee maintained that due to the delays which occurred during the process of the case, that it believed that Mr. Britton would not receive a fair hearing. The committee stated that "the disciplinary process was originally subject to four years delay, due to the likelihood of private civil proceedings, then latterly it was delayed by the need to gather extensive evidence and agree a date when all parties would be available. All of this has had a bearing on whether Mr. Britton could receive a fair hearing after so long".

Canter and Alison were also very critical of the work of Britton. They described Britton's work as mere intuitive personal opinion, and they wrote:

> Britton uses an additional device to help convince the audience of his profiling expertise – he presents points as separate though they are clearly related. For example in stating that an individual is sexually immature also implies he has few if any previous girlfriends. However, Britton is able to give the impression that these are two separate points merely by separating them by another point in a list of characteristics. It is perhaps more surprising, that nowhere in Britton's account are there any references to psychological principles or any indication of a process by which he has come to his conclusions. Thus despite an advert for Britton's book that boasts, 'if you did it he'll get you' we are no clearer by the end of the book of how 'he will get you.[68]

Paul Britton as we have seen has assisted the police in several cases in Britain, but David Canter is undoubtedly the father of offender profiling in Britain. Between 1982 and 1986 series of rapes and murders occurred in London and the Home Counties and the police were not making any progress in apprehending the offenders. Hence, the police sought the help of David Canter, a Professor of Psychology, presently at the University of Liverpool. In July 1985, three violent rape attacks occurred and the police launched 'Operation Hart'. In August 1985 John Duffy was arrested and charged with violent offences but was released on bail. Immediately after Duffy was released, a nineteen year old girl, Alison Day, was dragged from an East London train and taken to a garage where she was raped and killed. Another girl, fifteen year old Maartje Tamboezer was also raped and killed on her way to the shops in West Horley, three months later. Her body was set on fire. However, semen traces were found. Another attack occurred on May 18, 1986 when Mrs. Anne Lock was abducted on her way to work.

[68] David Canter., and Lawrence Alison, "Profiling in Policy and Practice", in D. Canter., and A. Lawrence, (eds) Profiling in Policy and Practice, 8 (1999).

Having found semen traces on one of the bodies, the investigations intensified. John Duffy was re-arrested, interviewed, but he refused to give blood sample. Duffy was again released on bail and he later bribed one of his friends to "mug" him. He reported to the police that he has been mugged and voluntarily checked himself into a psychiatric hospital claiming that he is suffering from trauma and amnesia as a result of the mugging. John Duffy attacked and raped another girl, a fourteen year old girl. The girl survived the attack. She was blindfolded during the attack but a caught a glimpse of Duffy when his mask fell off. She later identified Duffy as her attacker at the identification parade.

The profile compiled by Professor Canter matched Duffy's characteristics and he was placed under surveillance.[69] A few weeks later, he was arrested at his mother's house where physical evidence was gathered. It should be noted that his blood sample matched the semen traces found on Maartje Tamboezer's body. Some fibres found on Duffy's clothing also matched those found on one of the victims. Strings found at Duffy's house also matched the strings used to bind the victims. Thus, there was enough evidence to charge Duffy with the murders and rapes. Mr. Justice Farquarson on February 26, 1988 sentenced Duffy to seven life sentences.

In this chapter, we have defined offender profiling. A historical account of offender profiling has also been discussed. In the next chapter, we discuss the different approaches to offender profiling, examining their various strengths and weaknesses.

[69] Canter, supra note 2, at 52 – 57.

CHAPTER TWO

Approaches to Offender Profiling

There are three main approaches to offender profiling – Diagnostic Evaluation or Clinical approach, Criminal Investigative Analysis or the FBI approach, and the Investigative Psychology or Environmental Psychology approach. In recent times however, some scholars have developed other 'approaches' such as Geographic Profiling, Behavioral Evidence Analysis, and Crime Action Profiling.

Diagnostic Evaluation (DE) or Clinical Approach

> Behavioral details from crime scenes, reconstructed crime activity and witness accounts can offer an additional perspective to forensic information gathered by traditional investigative methods. This behavioral information can often provide insights into the thinking patterns and personal habits of offenders that extend beyond the limits of the offence itself. The offender's focus of interest, the type of relationship that he makes with the victim, the criteria by which he chooses the circumstances of the offence, the amount of planning he engages in and the risks he is willing to run, all help to build up a picture of the offender's mental world. This, in turn, can provide useful insights into his likely motivations, his personal needs, his lifestyle and his past history. The professional who considers these issues is more likely to understand the contexts within which the offender commits the offence. This broad, contextual information can help generate, or support, particular lines of enquiry during investigations. This type of information can be particularly useful, for instance, where linked series of offences are being investigated, where the victim may be a stranger to the offender, or where an offence seems bizarre and inexplicable.[70]

[70] Richard J. Badcock, "Developmental and clinical Issues in Relation to Offending in the Individual", in Janet L. Jackson, and Debra A. Bekerian, Offender Profiling: Theory, Research and Practice, 40 (1997).

Diagnostic Evaluation or Clinical Approach is the oldest approach to offender profiling. It is an approach mainly adopted by psychiatrists and clinical psychologists. Diagnostic evaluation approach looks at offenders from a mental illness point of view and tries to examine crimes and crime scenes from that perspective. Based on their clinical practice experience, their knowledge of mental health processes and their knowledge of psychological disorders, these practitioners try to predict the type of offenders who are likely to be responsible for certain types of criminal behavior. Hence, the diagnostic evaluation approach "relies on the clinical judgment of a profiler to ascertain the underlying motives behind an offender's actions".[71]

The Diagnostic Evaluation approach is based on the premise that "psychiatrists may be able to offer insights into some of the more bizarre forms of clinical activity, or at least those which do not fit into the more normal pattern of criminal behavior. In some cases the police may be baffled by a particularly unusual crime and might be struggling to interpret the significance of some aspects of the incident. In such cases a psychiatrist or clinical psychologist may, from their knowledge of many forms of mental illness, be able to offer an explanation for behaviour which appears, on first encounter, to make little sense. Whilst the media may talk of a 'senseless' killing, the clinician may at least be able to offer an explanation of the killing from the offender's perspective"[72]. Under the diagnostic evaluation approach, "the construction of profiles is achieved by diagnosing

[71] Ainsworth, supra note 6, at 123.

[72] Id, at 141.

the probable psychopathology and/or personality type likely to have committed the crime. However, such a diagnosis can vary widely among different practitioners"[73].

There is general agreement that some forms of mental illness may predispose certain individuals to commit certain crimes. This is why psychiatrists and clinical psychologists play a very important role in offender profiling. Their knowledge of mental disorder, for instance, helps them to be in a better position to produce a profile of the individuals likely to commit certain types of crime, especially crimes showing elements of psychopathology, paraphilias and sadomasochistic behavior. Indeed, Badcock noted that "the mental disorders most commonly associated with offending are the psychoses, sociopathic personality disorder and drug/alcohol additions"[74].

Diagnostic evaluation approach was very useful and in fact seen to be accurate in the "New York Mad Bomber" case in 1956, when Dr. James Brussel produced a psychological profile of the bomber using this approach.[75] This approach was also used by Dr. Thomas Bond in profiling Jack the Ripper. Similarly, this was also the approach used to produce a psychological profile of US President Woodrow Wilson (this was not for criminal investigation).

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[73] Paul Wilson, Robyn Lincoln, and Richard Kocsis, "Validity, Utility and Ethics of Profiling for Serial Violent and Sexual Offenders", Psychiatry, Psychology, and Law, Vol.4, No. 1, 3 (April 1997).

[74] Badcock, supra note 70, at 26.

[75] supra at 44.

In spite of the above noted successes of diagnostic evaluation, it is not without criticism. The scientific basis of this approach is still in question. This is an approach that relies heavily on the personal clinical experience and knowledge of an individual practitioner. As such it is subjective and cannot be empirically tested.

Another criticism leveled against this approach is that it is an approach done by psychiatrists and psychologists who do not have any law enforcement background. Egger argued that diagnostic evaluations are done by psychiatrists and psychologists who "have very little experience or knowledge of law enforcement or investigation"[76]. Wilson et al sees the main problem with this approach as being its individualistic nature, arguing that "this individualistic approach also prevents adequate comparative assessments of validity, utility and process, and the category of profiling now in the ascendancy is that of crime scene analysis"[77]. Ainsworth also argued that "rather than studying a large number of cases and drawing inferences from those, this approach is more likely to involve multiple observations of single cases"[78]. Ainsworth further contended that "such an approach has some advantages but may also suffer from some disadvantages when compared to approaches which involve the study of large numbers of cases. For example, the single case study allows for a very detailed consideration of all the aspects of one incident and may thus produce information which a less considered examination might reveal.

[76] Egger, supra note 15, at 250.

[77] Wilson, Lincoln, and Kocsis, supra note 73, at 4.

[78] Ainsworth, supra note 6, at 141.

However, information derived from such a single case may be so specific to that incident that it is all but impossible to extrapolate the findings to other investigations"[79].

In the final analysis, it should be noted that all other approaches to offender profiling originated from diagnostic evaluation, and as we have seen it has proved very useful in several cases. The most important thing about this approach is that it offers a better and more authoritative insight into the motivations underlying an offender's criminal action.

Criminal Investigative Analysis (CIA)/FBI Approach or Crime Scene Analysis (CSA)

> Although obviously an oversimplification, the basic blueprint for the FBI approach involves considering the available aspects of the crime scenes; the nature of attacks; forensic evidence; and information related to the victim: then classifying the offender and, finally, referring to the appropriate predictive characteristics. Results from such investigations are incorporated in a framework which basically classifies murderers according to whether they are 'organized' (which implies that murderers plan their crimes, display control at scene of crime, leave few or no clues, and that the victim is a targeted stranger) or 'disorganized' (which implies that murders are not planned and crime scenes show evidence of haphazard behaviour) or a mixture of the two.[80]

[79] Id.

[80] Jackson and Bekerian, supra note 17, at 4.

The FBI defined Criminal Investigative Analysis as "a process of reviewing crimes from both a behavioral and investigative perspective. It involves reviewing and assessing the facts of a criminal act, interpreting offender behavior, and interaction with the victim, as exhibited during the commission of the crime, or as displayed in the crime scene".[81] This approach is based on crime scene analysis and involves an examination of the method of operation and other behavioral patterns that can be deduced from the crime scene characteristics. Having found that the diagnostic evaluation approach proved very helpful in apprehending unknown serial killers, and having been influenced by the work of Dr. James Brussel, the FBI introduced criminal investigative analysis. It should be noted that criminal investigative analysis is done by the Behavioral Analysis Unit (Behavioral Sciences Unit) of the FBI based in Quantico, Virginia. This approach is undoubtedly the most popular approach. In fact, this approach is fast becoming synonymous with the term 'offender profiling' itself. This does not mean that this is the most reliable approach. This situation exists because those in law enforcement field see offender profiling as their own exclusive club, and have virtually succeeded in showcasing themselves as the one and only group of people who are better placed to produce the best and most accurate profiles. Are they correct? You will found out for yourself after reading this study.

However, there is no gainsaying the fact that the FBI has given immense popularity to this crime investigation technique. In line with Kocsis, "this popularization in itself is a significant accomplishment that should not be underestimated or devalued as without these efforts it is debatable to what extent, if at all, the practice of profiling would have

[81] http://www.fbi.gov/hq/isd/cirg/ncavc.htm (assessed January 16, 2007).

evolved beyond the classical circumstance of DE"[82]. This technique is undoubtedly the offshoot of diagnostic evaluation and it was after the work and contributions of Dr. James Brussel that the FBI began to embrace and develop this technique.

In the 1970's the FBI were frustrated with the fact that physical evidence even when it was present at a crime scene did not provide clues to the sort of individuals that they should be looking for. With this in mind, they used data from serious sexual assault and murder cases and tried to see if they could identify the behavioral characteristics of these sort of offenders. They also carried out in-depth interviews with 36 convicted serial killers. As Ainsworth has pointed out, "a careful recording and analysis of the crimes which these offenders had committed built up a database. Based on this information, the FBI advocated that important information could be gleaned by: (1) a careful examination of the various aspects of the crime scene, (2) a study of the nature of the attacks themselves, (3) careful consideration of the medical examiners report, (4) the identification of the characteristics of the type of victim selected".[83]

Under this approach, an offender is classified according to whether the crime scene appeared to be organized or disorganized. This classification of offenders into organized or disorganized offenders helps investigators to draw conclusions as to the characteristics of the likely offenders. The FBI maintained that the organized and disorganized offenders have different demographic and behavioral characteristics. According to the FBI, the crime scene of an organized offender shows the following features:

[82] Richard N. Kocsis, Criminal Profiling: Principles and Practice, X111 (2006).

[83] Ainsworth, supra note 6, at 16.

- Shows signs of some sort of planning.
- Shows that the offender was in control at the scene.
- Shows evidence of forensic awareness by the offender (revealed by the lack of physical traces at the scene).

Ressler et al maintained that organized offenders tend to:[84]

* Have a high birth order (often being the firstborn son in a family).

* Their father's work history is generally stable.

* Parental discipline is perceived as inconsistent.

* Have mobility (his car is in good condition).

* Likely to choose a stranger as the victim.

* This type of offender is intelligent and possibly an underachiever.

* Socially skilled.

* Sexually competent.

* Likely to be living with a partner.

* Likely to be depressed and experiencing a great deal of anger around the time of attack.

* Likely to follow news report about the attack and likely to leave the area after the attack.

On the other hand, the FBI maintained that the crime scene of a disorganized offender tend to show the following features.

[84] Robert K. Ressler., Ann W. Burgess., and John E. Douglas, Sexual Homicide: Patterns and Motives, 121 (1992).

- Shows evidence of little or no planning.
- Shows that the attack was random.
- Shows that the offender carried out the attack when in a frightened or confused state of mind.
- Shows evidence of disorganized behavior.
- The offender chooses any weapon that he or she can find at the scene and is likely to leave the weapons at the scene.
- There is little or no attempt made by this type of offender to conceal any clues at the scene.

It has also been noted that the disorganized offender is:[85]

- Likely to live alone.
- Lives near the scene of crime.
- Socially and sexually inept.
- Likely to be of below average intelligence.
- Suffers from some form of mental illness.
- Likely to have suffered physical or sexual abuse as a child.
- Likely to be of low birth status in the family.
- Father's work is unstable.
- This type of offender has poor work history.
- Likely to have suffered harsh parental discipline.

[85] Id, at 130.

This classification into organized and disorganized offenders helps to determine at the outset whether a series of attacks are likely to be the work of one person or more individuals.

The FBI also classified crime scenes into the organized crime scene, disorganized crime scene, mixed crime scene and the atypical crime scene. The organized crime scene as we have seen shows elements of planning and premeditation, as well as attempts to conceal any physical traces. The disorganized crime scene shows a high level of disorganized and disoriented behavior; appears to be unplanned and random, and no attempts are made to conceal any physical traces. The mixed crime scene refers to a crime scene that shows the characteristics of both the organized and the disorganized. Davies noted that "this could indicate the presence of two offenders in the crime, or it could indicate that one offender had planned the crime and then abandoned the plan due to unforeseen circumstances, or it could indicate that an offender had staged the outcome (made it look like something else)"[86]. The atypical crime scene is one where no classification can be made because of lack of available information. This is usually the case where they crime scene was located several years later.

The FBI has done considerable specific analysis of offenders who rape. They classified rapists into two – selfish and unselfish rapists.[87] As Ainsworth has pointed out "the

[86] Joseph A. Davies, "Criminal Personality Profiling and Crime Scene Assessment": A Contemporary Investigative Tool to Assist Law Enforcement Public Safety", Journal of Contemporary Criminal Justice, Vol. 15, No. 3, 296 (August 1999).

[87] Robert R. Hazelwood, "Analyzing the Rape and Profiling the Offender", in Robert R. Hazelwood., and Ann W. Burgess, (eds), Practical Aspects of Rape Investigation: A Multidisciplinary Approach, 3rd edition, 134 (2001).

distinction refers to the extent to which the rapist showed any consideration towards the victim during the act"[88]. According to the FBI, the selfish rapist tends to be:

- Violent, shows a high level of aggression.
- Shows total sexual dominance.
- Shows self-confidence.
- Makes no attempt to establish any form of intimacy with the victim.
- Engages in anal sex, followed by fellatio.
- Tends to use very offensive, threatening, abusive, profane, demeaning, humiliating, impersonal and sexually oriented language.

The unselfish rapist on the other hand is seen to show:

- Lack of self-confidence.
- Does not appear to be violent in the attack. Tends to use minimal level of force.
- Not likely to cause any physical harm.
- Likes to involve the victim in the sexual act, tries to establish some sort of intimacy.
- Likely to tell the victim to perform certain sexual acts on him. For instance he may ask the victim to kiss him, fondle him and so on.
- Tends to use language that is personal, reassuring, complimentary, non-profane, concerned and apologetic.

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[88] Ainsworth, supra note 6, at 103.

This classification is useful because it is believed that verbal utterances by the offender during the attack will reveal a lot of information about him or her. Above all, this classification helps in choosing an appropriate interviewing/interrogation strategy.

Following the usefulness of the above classification, the FBI made further classification of rapists. Hazelwood maintained that there are four types of rapists:[89]

(1) Power Reassurance Rapist or Compensatory Rapist:

This type of rapist sees rape as a way of showing his masculinity and sexual adequacy, and shows the signs of an unselfish rapist. This type of rapist sees rape as a way of removing any doubts about their sexual inadequacy. In fact, "the sexual act goes some way to reassuring the perpetrator about his insecurity. However, the effect may be short lived, and the offender might strike again within a few days or weeks, and probably in the same district. It is not uncommon for such a perpetrator to take an item of clothing or other possession from his victims as a bizarre 'trophy'. He may also keep careful records of his conquests. As the primary motivation is the removal of feelings of inadequacy, this type of perpetrator is unlikely to stop offending until he is caught and incarcerated."[90]

It has also been noted that this type of rapist usually attacks in late evenings or early mornings when the victim is likely to be alone or with small children, and that this type

[89] Hazelwood, supra note 87, at 141.

[90] Ainsworth, supra note 6, at 105.

of rapist also chooses a victim about his own age and his own race.[91] It is also believed that this type of rapist likes to think that the victim is 'enjoying' the rape and is most likely to ask the victim to undress on his/her own. They appear to be concerned about the welfare of the victim and tend to feel some sort of remorse, and likely to apologize to the victim. Holmes and Holmes maintained that this type of rapist is likely to be single, lives with one or both parents, non-athletic, quiet, passive, social loner, with limited education, often employed in a menial job, likes to visit adult bookstores, likely to be a transvestite, a fetishist, involved in voyeurism, excessive masturbation and exhibitionism, tends to attack in his own neighborhood, and most likely to have been raised by an aggressive, seductive and dominating mother.[92]

Furthermore, "for this rapist, the sex act validates his position of importance. He perceives himself as a loser, and by controlling another human being he hopes to make himself believe that he is important, if only temporarily. For this reason, he uses only enough force to control his victim"[93]. Holmes and Holmes have suggested that when interviewing this type of rapist that the interviewer should adopt the strategy of appealing to the rapist's "sense of masculinity", arguing that "the interviewer might indicate to him that the woman who was raped in the case under investigation has not suffered "undue" trauma, and that the police realize the rapist had no desire to harm his victim; such a statement could set the stage for a "sympathetic" relationship that might result in the

[91] Id.

[92] Holmes and Holmes, supra note 18, at 20.

[93] Id, at 121.

rapist's sharing information, not only about the rape currently under investigation, but about other suspected connected rapes".[94]

(2) **Power-Assertive Rapist or Exploitative Rapist:**

The power assertive rapist sees rape as an expression of his masculinity and superiority. This rapist has no doubts or fears about his sexual adequacy and falls under the selfish category. Therefore, they tend to use force during the attack. "This type of rapist may well tear his victim's clothing and discard it. He may also carry out repeated sexual assaults rather than just one, thus adding to his assailant's feelings of virility and dominance. If the man has driven the victim to the location of the rape, he may well leave her there without her clothing, and as a result the victim will be unable to report the assault swiftly"[95].

This type of rapist is normally athletic and does not see anything wrong with rape. For them, raping of women is 'normal'. Date rapes fall into this category and they are normally problematic in prosecuting. It has been observed that this type of rapist is likely to have been raised in a single parent family, lived in foster homes, suffered physical abuse as a child, a high school dropout, has domestic problems, unhappy marriages, likes to visit bars, likely to be employed in macho occupations – construction or police work, and likely to choose a victim of his own race.[96]

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[94] Id, at 122.

[95] Ainsworth, supra note 6, at 106.

[96] Holmes and Holmes, supra note 18, at 126.

Holmes and Holmes have suggested that:

> It is best for the interviewer to approach the interview session with all the facts in hand: the placement of the suspect at the scene, physical evidence that directly implicates him in the rape (or rapes), and other pertinent information that shows the interviewer is a professional. What the police should communicate is, We know you did it, and this is how we are going to prove it. If the interviewer is in error about the facts, or if there is some other reason for the rapist to discount the interviewer's competence as a professional, it is unlikely that any cooperation will be gained from the rapist through any means, including intimidation, pleas for aid, and appeals based on the victim's welfare.[97]

(3) **Anger-Retaliatory Rapist:**

As the name suggests, this type of rapist tend to rape as a result of his anger and distaste of women. This rapist is extremely angry, violent and basically hates women. They derive sexual excitement by hurting women and see women as the source of their troubles, and so seeks revenge. As such "this type of rapist appears to commit his assaults as a way of expressing his own rage and hostility. He appears to possess a great deal of anger and animosity towards women in general and uses the act of rape as a way of expressing or releasing this anger. He also appears to derive pleasure from degrading his victims. The style of the rape will be particularly selfish and the perpetrator will use extreme amounts of violence"[98].

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[97] Id, at 128.

[98] Ainsworth, supra note 6, at 106.

Generally speaking, this type of rapist likes to perform degrading sexual acts on the victims, the attack tends to be unplanned, the victim is likely to be someone who closely matches the woman the rapist sees as the source of his troubles. The rapist is likely to be married, have many affairs, and is likely to choose a victim of his own age. This type of rapist tends to come from a broken home, and is likely to have been physically abused as a child. Holmes and Holmes maintained that "some 80% have been reared by a single female parent or other single female caregiver"[99]. They suggested that the interviewer should be male as this type of rapist hates women.

(4) Anger-Excitement Rapist or Sadistic Rapist:

This type of rapist sees rape as a source of pleasure. The idea of torturing the victims provides this rapist with sexual excitement, and he likes to inflict pain on the victims. There is general agreement that this is the most dangerous of all rapists. The attack tends to be planned, violent and could result in murder. This rapist is likely to have a 'rape kit', which he takes to the location of the attacks. Furthermore, this type of rapist falls under the selfish category and likes to see the victims suffer; likes to instill fear in the victims and most likely to choose the type of victim that will fulfill his inner fantasies/desires. This rapist will continue to rape until he is caught. This rapist is likely to come from a single – parent family, with divorced parents, lived in foster homes, age range 30 – 39, physically abused as a child, raised in a sexually deviant home, married, with some college education, employed in white collar jobs, likely to be a middle class family man,

[99] Holmes and Holmes, supra note 18, at 123.

has compulsive personality, ritualistic, likely to stalk and eventually kill victims.[100] Holmes and Holmes noted that there is no interviewing strategy that is effective with this type of rapist.[101]

Having discussed these examples of various classifications of offenders by the FBI, we now move on to discussing how a typical criminal profile is produced. Douglas et al have clearly outlined the various stages involved in the criminal profile generating process thus – profiling inputs, decision process models stage, crime scene assessment, criminal profile, investigation and apprehension.[102]

(1) **Profiling Inputs**: This involves collecting all available information about the crime, including physical evidence, crime scene photographs, autopsy reports, witness and victim statements, as well as police reports. Detailed background information about the victim is noted. It should also be noted at this stage whether the crime scene is indoors or outdoors. "In homicide cases, the required information includes a complete synopsis of the crime and a description of the crime scene, encompassing factors indigenous to that area to the time of the incident such as weather conditions and the political and social environment"[103].

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[100] Id, at 129.

[101] Id, at 131.

[102] This discussion draws from the work of Douglas, Ressler, Burgess and Hartman, "Criminal Profiling from Crime Scene Analysis", Behavioral Sciences and the Law, Vol. 4, No. 4, 401 – 421 (1986).

[103] Id, at 406.

(2) **Decision Process Models**: At this stage, the profiler organizes "the input into meaningful questions and patterns"[104], (for example, what type of murder – serial, mass or spree murder?). What is the primary intent? The location, pattern and acts that took place before and after the offense will also be noted at this stage. At this stage, attempt will also be made to ascertain the length of time taken to carry out the attack.

(3) **Crime Scene Assessment**: This is arguably the most crucial stage and care should be taken to note whether the crime scene is staged or not. The profiler at this stage tries to reconstruct the behavior of the offender and the victim. The aim here is to try to ascertain what kind of weapon was used and the type of injuries. Here the profiler also tries to classify the crime scene and the likely offender. Does the crime scene appear to be the work of organized or disorganized offender? Also to be determined at this stage are the likely motives of the crime.

(4) **Criminal Profile**: At this stage, the profiler formulates an initial description of the most likely suspects. The actual criminal profile is now created and the best methods of apprehending the unknown offender will be suggested. A criminal profile usually contains such information as the likely age, race, height, gender, marital status, job type, education, location, criminal record, military background, social skills, sexual life as well as use of drugs or alcohol.

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[104] Id.

(5) **Investigation**: At this stage a written report will be presented to the investigators and they will concentrate on the suspects matching the profile. Any new information about the crime or other connected crimes will also be put together.

(6) **Apprehension**: If any suspect is arrested, an interviewing technique will be chosen. The criminal profile is then evaluated to see how it matches the suspect.

The FBI approach has proved to be very useful in many cases. As Ainsworth has pointed out this approach constitutes "the first systematic attempt to classify serial and serious criminals on the basis of behavioral characteristics"[105]. Furthermore, "the classification made it somewhat easier to assess whether a series of crimes which appeared similar in many respects was likely to have been committed by the same person. If the police were investigating the abduction and murder of two young girls in the same area, the fact that one appeared to be the work of a disorganized murderer, and the other the work of an organized murderer may prove to be helpful. But, more importantly, the ability to assess whether a series of crimes was likely to be the result of a single perpetrator would be helpful in allowing the police to pool all the evidence accumulated on each single case in order to build up a better picture of the offender"[106].

The FBI approach has however, been criticized. It has been argued that their approach is not scientific, that the data sample was insufficient, that their approach is subjective and the fact that the FBI declines to share information about their methods, so that other

[105] Ainsworth, supra note 6, at 101.

[106] Id.

scholars can test their hypothesis. In the words of Ainsworth, "one immediate problem with this approach was the fact that the classification arose mainly from interviews with just 36 American, convicted, serial murderers. It was not clear whether the findings applied only to serial murderers, who are after all a type of offender which is still statistically extremely rare, even in the USA. The fact that all the interviewees were convicted murderers also raises the question as to whether more successful murderers (i.e. those who have not been caught) might have provided different information. It is also not clear whether any information obtained from this American sample is directly applicable to offenders in different countries"[107]. Ainsworth also maintained that "to base a major classification on such a small number of specialist offenders is somewhat questionable"[108]. He further argued that the FBI approach lacks clarity, and that "the lack of clarity is not helped by the fact that the FBI is reluctant to allow social scientists to test their hypotheses in a systematic and objective way. The situation is confused further when former FBI employees who have written memoirs of their exploits appear to contradict each other. (see for example Douglas and Olshaker, 1995 and Ressler and Shachtman, 1992)"[109].

Canter and Alison were also very critical of the FBI approach and they maintained that "a careful examination of the content of their profiles shows a severe lack in accounts of any systematic procedures or any substantive theoretical models of behaviour. There is no

[107] Id, at 102.

[108] Id, at 110.

[109] Id, at 114.

reference to any commonly accepted psychological principles – pathological or social"[110].

Wilson et al also argued that "first it is believed that this approach has no real theoretical basis. It simply reduces human behavior to a few observable parameters which lead to characteristics of the unknown offender. Second, the various descriptors used in the classification manual are not weighted or given any order of priority. The typologies include an extensive range of crime scene indicators and their associated heuristic inferences, but the formulation of profiles is still left to the subjective interpretation of the individual compiling them".[111]

On a similar vein, Muller contended that this approach "relies heavily on the experience and intuition of the profiler, both of which are difficult to empirically test. One of the main problems with a scientific analysis of CSA is that its proponents have never felt the need to have it scientifically verified"[112]. Muller further argued that:

> Many of the claims of CSA sound much like those of psychoanalysis, with talk of fantasies and sexual motivations, and like psychoanalysis, these claims do not seem to be falsifiable in most cases. Take, for example, the following statement: "Although some of the murderers in our study did not report fantasies in conscious way, their descriptions of the murders they committed reveal hidden fantasies of violence" (Ressler et al., 1988, p.52). We may be left wondering when FBI agents became experts in interpreting the unconscious fantasies of others. If one claims that a violent murder is a sign

[110] Canter and Alison, supra note 1, at 6.

[111] Wilson, Lincoln and Kocsis, supra note 73, at 5.

[112] Damon A. Muller, "Criminal Profiling: Real Science or Just Wishful Thinking?", Homicide Studies, Vol. 4, No. 3, 248 (August 2000).

> of violent fantasies – even if the murderer does not report any violent fantasies – then how is one to falsify the hypothesis that murderers have violent fantasies?
>
> As it stands, the CSA approach is not a good candidate for falsifiability, primarily due to the nature of the ideas that it is based on. A further problem is that those involved have had little interest in their work being empirically substantiated. One of the problems is that of operationalizing the variables.[113]

The major problem with the FBI approach relates to the fact that there is no method of testing the reliability, validity/consistency of their methods. This approach is subjective and needs to be used with caution. It should be noted however, that their classification of crime scenes and offenders has been very useful in crime investigations.

The Investigative Psychology (IP) or Environmental Psychology Approach

> I quickly realized that 'profiling' lacked any clearly articulated or scientifically based set of procedures, findings or theories and that many of the people following in my footsteps were doing little more than attempting to live up to a media created fiction. I therefore set about creating a new discipline that I named Investigative Psychology that would offer a real scientific base for the development of our understanding of criminal behaviour in ways that are relevant to police investigations. The Centre for Investigative Psychology that I have set up at The University of Liverpool now provides a framework for that activity.[114]

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[113] Id, at 249.

[114] David Canter, Biography, http://www.liv.ac.uk/psychology/staff/dcanter.html (last accessed February 11, 2007).

The Investigative Psychology approach was developed by Professor David Canter, currently a professor of psychology at the University of Liverpool. This approach started in 1985 when Professor Canter said that he was invited by Detective Chief Superintendent Thelma Wagstaff and Detective Chief Inspector John Grieve to Scotland Yard office to discuss the possibility of using psychology to assist in police investigations. Canter admitted that at the beginning he had no experience of police procedure/investigations and had just little knowledge of criminal behavior. However, after more contact with the police detectives, and police investigations, Canter said that he "felt a start had to be made somewhere to see whether even elementary psychological principles could be used to help a major police investigation".[115] In 1986, Canter wrote a letter to Detective Chief Superintendent Thelma Wagstaff regarding a series of rapes he had read about in the local newspaper. In response to the letter, he was invited to Hendon Police College where an incident room was set up in connection with the rapes (named the Hart inquiry). Canter stated that it was at this meeting that he was formally asked by Detective Chief Superintendent Vince McFadden, the head of Surrey CID, to "use whatever skills I might have as a psychologist to contribute directly to a major inquiry into rape and murder"[116]. Canter noted that this was in effect the beginning of his "personal journey to see if a criminal's actions in a crime really could reveal systematically his key identifying characteristics"[117].

Canter maintained that a criminal leaves not only physical traces at a scene of crime, but also psychological traces, and that by examining these psychological traces, investigators can have an

[115] Canter, supra note 2, at 29.

[116] Id, at 33.

[117] Id.

idea as to the sort of person likely to commit a particular crime.[118] Following the footsteps of the FBI and drawing from their work, Canter maintained that "the only way open to me to discover what profiling could be, and how it might relate to the psychological theories and methods that I knew, was by working alongside an ongoing investigation, trying out ideas as they occurred to me. This is not the best way to become involved in any area of research, coming up with possible results without the time or resources to test them thoroughly, but it was the only way forward".[119]

Professor Canter came up with what he called a five-factor model of offender behavior. He based his work on the five aspects of the interaction between the victim and the offender. According to Canter, the five aspects of interaction are interpersonal coherence, significance of time and place, criminal characteristics, criminal career and forensic awareness.

Interpersonal Coherence:

Canter argued that an offender's criminal activity makes sense to them within their own personal psychology. This involves analyzing an offender's criminal actions to see if it is related to the way he/she deals with other people in non-criminal situations. It is believed that an offender's actions at a crime scene mirror his or her actions in non-criminal day to day activities. As such, "the psychologist should be able to determine something about the offender from the victim and the way the offender interacted with the victim (where this can be determined, such as with

[118] Id.

[119] Id, at 35.

rape)".[120] "For instance, the offender will select victims that are consistent with the important characteristics of people who are important to the offender".[121]

Significance of Place and Time:

Canter believed that an offender will likely choose to attack at a location that has some sort of significance to him or her. There is the idea that offenders tend to commit murder and rape in familiar locations, where they feel in control and comfortable. "Therefore, if all of the crimes are committed in a certain geographic location, there is a high chance that the offender lives or works around the area".[122] Furthermore, an examination of the place and time of an attack "may provide valuable information on the constraints of offender's mobility. Addressing the characteristics of the criminal allows researchers to determine whether the nature of the crime and the way it is committed can lead to a classification of criminal characteristics. This may lead to common characteristics of a subgroup of offender and provide some guidance for the direction of the investigation. The development of a person's criminal behavior may allow the police to backtrack the probable career of the unidentified offender and narrow the possibilities".[123] "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

[120] Muller, supra note 112, at 241.

[121] Id.

[122] Id, at 242.

[123] Egger, supra note 15, at 247.

truck driver. Conversely, crime scenes that are proximal may indicate a lack of access to transport".[124]

Criminal Characteristics:

Here attempt is made to classify offenders, the crimes, and the crime scenes. There are various ways of classifying offenders and crimes scenes. For instance, the FBI's classification into organized and disorganized offenders, power reassurance rapists, power assertive rapists, anger retaliatory rapists and anger excitement rapists.[125]

Criminal Career:

It is believed that many offenders do not change their crime patterns. Therefore, attempts should be made to determine if the likely offender is a career criminal. This involves looking at the possible skills and occupations of the likely offender.

Forensic Awareness:

Canter also maintained that if a crime scene reveals that the offender took conscious steps to conceal physical evidence, that such offender is likely to have had previous contact with the police and knows about crime scene investigation techniques. Therefore, this sort of offender is likely to have a criminal record, and so investigators are able to narrow their search to suspects with criminal records.

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[124] Wayne Petherick, "What's in a Name? Comparing Applied Profiling Methodologies", 5 Journal of Law and Social Challenges, 181 (Summer 2003).

[125] supra at 47.

Drawing ideas from environmental psychology, Professor David Canter also came up with what he called the "Circle Theory of Environmental Range"[126]. He maintained that there is some sort of relationship between criminal activity range and the home base of serial offenders. Canter argued that serial offenders tend to attack and operate in locations where they feel in control and comfortable. The circle theory emphasizes the study of offenses to find out the offender's home base. It involves the prediction of an offender's residential area by examining the spatial distribution of serial offenses.

In his circle theory, Professor Canter came up with two models – The Marauder and the Commuter. The marauder is the serial offender who commits crime within his home base, while the commuter travels a distance from his home to commit crime. For Canter, there is a causal relationship between the marauder and his home base as opposed to the commuter model where there is no causal relationship.

In order to test the circle theory, Godwin and Canter in 1997 carried out a study in the United States involving 54 male US serial killers.[127] These 54 serial killers were only those who were convicted of at least 10 murders on different dates and at different locations. Godwin and Canter gathered data from various police departments in the US and also studied 540 victims. Their study was based on the following hypothesis:

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[126] David Canter, and Larkin P, "The Environmental Range of Serial Rapists", Journal of Environmental Psychology, 13, 63 – 69, (1993).

[127] Maurice Godwin., and David Canter, "Encounter and Death: The Spatial Behavior of US Serial Killers", Policing: An International Journal of Police Strategy and Management', Vol. 20, No. 1, 24 - 38 (1997).

(1) The home operates as a focus for the activities of serial killers in apprehending their victims and leaving their bodies. The focus is hypothesized as being the most likely center of gravity of their actions.

(2) There will be differences in the distances traveled to apprehend victims and to leave their bodies. It is proposed that the dumping of the body carries most evidential implications and therefore is likely to be a further distance as well as being more likely to be shaped by buffering processes.

(3) The distances serial killers travel to dump the victims' bodies are likely to change systematically over time while the victims' points of fatal encounter locations are not. The counter-intuitive possibility that this change relates to an increasing incorporation of all his killing activities into his domestic area will also be tested.[128]

Their study showed the home as a focus of serial murder, which implies that serial killers are most likely to apprehend nearly all their victims near their home (serial killer's home).[129] Their study also "indicates that the offenders, on average, tended to make initial contact with their victims closer to home than the locations in which they eventually place the bodies"[130]. This study further showed that "as the number of murders increases, killers generally cover a narrower area in which to leave the bodies of their victims, until the ninth and tenth offenses where the offender may be disposing of bodies quite close to his home. This pattern contrasts markedly with the locations at which the

[128] Id, at 27.

[129] Id, at 29.

[130] Id, at 31.

initial contact is made with the victim. All ten of the murders in the sequences studied here tended to be close to the home base of the offender, typically less than a couple of miles from his residence"[131]. In a nutshell, Godwin and Canter concluded that as the series of offenses progresses, the sites where the serial offender dumps the bodies of victims get closer to the offender's home, and that this could be as a result of the serial offender trying to reduce the risks associated with transporting the body, and could also be that the offender has gained more confidence.

Obviously, this study by Godwin and Canter is very useful for investigators in making decisions as to the first areas to search for suspects. This however, has to be approached with extreme caution. In fact, Godwin and Canter even drew attention to this issue and they called for more research to explore this process, arguing that "the systematic changing of locations and distances relative to the home base may be a deliberate ploy to distract police attention from the killer's home base"[132]. Above all, no investigator can really be sure of the number of victims and the locations in any serial killing case. Godwin and Canter suggested that "investigative efforts should go into interviewing people within the neighborhood from which victims go missing in order to pinpoint precisely the address or location where the victim may have been last seen."[133]

[131] Id, at 35.

[132] Id, at 36.

[133] Id.

It should be noted at this point that Investigative Psychology approach uses a statistical analysis method called Multi-dimensional Scaling (MDS). There are different types of MDS and IP uses the type called Smallest Space Analysis. "In very simplistic terms multi-dimensional scaling is a method of statistically analyzing the relationships between multiple variables simultaneously"[134]. For a more detailed discussion of the MDS, please see the work of Palermo and Kocsis.[135]

> Data analyzed using MDS enable the creation of a diagram within which the variables under consideration can be individually plotted. Where these variables appear within a diagram (i.e. plotted) denotes the relationship they hold with each other. Consequently, variables that are plotted in a region of space close together hold a relationship with each other. The closer any variables are plotted together, the stronger their relationship or association. The opposite applies with variables appearing far apart in a MDS diagram indicating that the variables hold few similarities in that case. Furthermore, variables that appear in a location between other variables can be interpreted as holding some central or common relationship. In addition to the relationship plotted variables may have with each other in MDS diagram, their respective positions also convey some impression of their distinctiveness. Thus, variables that appear closer to the center of a MDS diagram are typically found to be commonly occurring variables, where as those that are plotted in the outlying regions of a MDS diagram, are said to be more distinctive.[136]

Investigative psychology approach seems to have advantage over the other approaches and has been well received by many scholars. Muller, for instance, maintained that

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[134] G. B. Palermo and R. N. Kocsis, Offender Profiling: An Introduction to the Sociopsychological Analysis of Violent Crime, 158 (2005).

[135] Id, at 157 – 177.

[136] Id, at 158.

"unlike CSA, IP was designed from the beginning with science in mind but this does not mean that it is a science in itself. Canter and his colleagues have attempted to use established psychological principles and research methodology to create a discipline that is empirically sound and open to peer review. IP has a great deal of potential to become a science, but it still has a long way to go before it will be recognized as a discipline in itself"[137]. Muller further noted that IP has the advantage that it falls under the established science of psychology or criminology, arguing that "as such, most of the theories that have been formulated as part of IP are constructed in such a way that can be easily falsified"[138]. This is in fact where IP appears to be of more value and stronger than the other approaches. One can safely say therefore, that if any approach is capable of becoming genuinely scientific on its own, then it is IP.

On a similar vein, Ainsworth maintained that "while Canter's work shares some commonalities with that developed by the FBI's Behavioral Science Unit, he has tried to place his approach within an accepted psychological framework. Canter believes that as a branch of applied psychology, his work goes beyond what is traditionally thought of as offender profiling. Canter's early work tried to understand the type of crime in which any one individual might be likely to become involved, and he also considered the way in which such a crime might be carried out. Most importantly, Canter tried to establish whether the way in which an offender's behaviour while committing a crime mirrored their behaviour in everyday life. Canter suggested for example, that in their choice of

[137] Muller, supra note 112, at 251.

[138] Id.

victims, offenders will only select people who, even within non-offending behaviour, are important to them. Canter supports this viewpoint by reference to the fact that the vast majority of serial killers target victims within their own ethnic group."[139]

The Investigative Psychology approach has undoubtedly been criticized. Egger argued that IP practitioners lack police/law enforcement experience and also that IP does not make use of interview data of a wide range of offenders. Egger further argued that this approach psychology relies heavily upon victim information.[140]

Petherick was also critical of IP's model of offender behavior. He noted that "there is little available to tell the practitioner how to apply this model to an actual investigation. The original study that was done to develop the model was retrospective, that is, used solved cases where both the location of the offender's home and crimes were known. This must bring the practical application of this model into question, as it it would be practically impossible to know whether you were dealing with a marauder or a commuter with an unknown offender. The distances defined by the criminal range and home range are also problematic, as there is no clear relationship between the size or location of the criminal range and the distance it is from the offender's home"[141].

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[139] Ainsworth, supra note 6, at 118.

[140] Egger, supra note 15, at 252.

[141] Wayne Petherick, "Criminal Profiling: How it got started and How it is used", www.crimelibrary.com/criminal-mind/profiling/profiling2/4.html. (last accessed February 10, 2007).

Similarly, Ainsworth contended that "if one takes Canter's Circle Theory we can see some of the difficulties which can be encountered. His theory relies on one being able to draw a circle around all of an offender's crimes. Given some of the arguments presented ..., we must question how feasible this is. Not all crimes will be reported or recorded, and even those may be recorded inaccurately. Furthermore, in the real world of police investigation it will not be particularly easy to establish whether a series of crimes has been committed by the same individual"[142]. The statistical analysis adopted by IP can only be useful if it is based on accurate data.

Wilson et al were also highly critical of investigative psychology. They argued that:

> A weakness of Canter's work is that to date it does not necessarily offer anything new, although contributions from the field of environmental psychology do provide new avenues to explore. What it does do is encouch known criminological or psychological principles in ways that can be useful to the crime investigator. It utilizes the same factors as the FBI but places them firmly within psychological theory and methodology. It is not yet clear how well Canter's theories (especially circle theory) will be adapted for use in the United States with its higher rate of serial crime, its greater penchant for mobility, and its more vast urban environment in many regions.[143]

Muller did not agree with this criticism by Wilson et al. For Muller "this is probably a somewhat extreme view, as applying the application of psychological knowledge to criminal investigation potentially has great value. Canter has shown that the application of psychological principles and methodologies can, for example, help identify where the

[142] Ainsworth, supra note 6, at 132.

[143] Wilson, Lincoln and Kocsis, supra note 73, at 6.

offender might live and what his job might be (e.g., Godwin and Canter, 1997). It is very easy for those in academia to remain aloof and remote from the real world, yet this is an attempt to make some practical use of psychology by applying it to genuine social problems".[144] Indeed, the statement by Wilson et al is an overreaction. As we mentioned earlier on, if any approach to offender profiling has the potential of being generally accepted as scientific, then it is the IP approach. As we can see from the above discussion, IP is based on psychological theories. Research in the field of psychology is peer reviewed and accepted.

The main difference between the FBI approach and the investigative psychology approach is that the FBI approach is mainly drawn from crime scene analysis while investigative psychology approach goes further with the application of psychological theories/principles.

> ... whilst sharing some characteristics with the FBI's approach it does differ in a number of ways. For example, Canter and Heritage used statistical analysis in order to establish connections between various elements in rape behaviour. Publication of their methods and techniques also allowed other researchers to examine their work. Based on this, those who wished to do so could replicate the study but perhaps varying the method slightly. They may, for example, use different type of statistical analysis in order to test whether the conclusions remained the same under such conditions. The point is that by disclosing their methods and findings in an appropriate journal, researchers such as Canter and Heritage allowed the academic community to scutinize their work and to comment upon it. One of the reasons why the FBI's work has come in for so much criticism is that such an opportunity has never been afforded those who might wish to test the reliability or validity of their claims.[145]

[144] Muller, supra note 112, at 252.

[145] Ainsworth, supra note 6, at 123.

In the final analysis, one can safely say that even though Canter's investigative psychology approach offers a more scientific basis to offender profiling (based on psychological principles, and the use of statistical analysis), it still does not provide a way of using the profiles to point to specific offenders. Nevertheless, Canter has made and is still continuing to make very important contributions to the understanding of the theory and practice of offender profiling. The main strength of investigative psychology approach lies in the attempts to predict the location of serial offenders, by analyzing the spatial distribution of offenses.

Geographic Profiling

Geographic profiling was developed in 1995 by D. Kim Rossmo, a former police officer with the Vancouver City Police Department. Rossmo sees geographic profiling as "a strategic information management system used in the investigation of serial violent crime"[146]. He maintained that "this methodology was designed to help alleviate the problem of information overload that usually accompanies such cases", arguing that "by knowing the most probable area of offender residence, police agencies can more effectively utilize their limited resources, and a variety of investigative strategies have now been developed to maximize the utility of this process for unsolved cases".[147]

[146] D. Kim Rossmo, "Geographic Profiling",in Janet L. Jackson, and Debra A. Bekerian, (eds) Offender Profiling: Theory, Research and Practice, 174 (1997).

[147] Id.

Drawing ideas from environmental psychology and investigative psychology, geographic profiling "focuses on the probable spatial behaviour of the offender within the context of the locations of, and the spatial relationships between the various crime sites."[148]

Geographic profiling uses a computer program to analyze crime scene locations in an attempt to predict the likely residence of the offender. This computerized program is known as Criminal Geographic Targeting (CGT). Rossmo believed that "by examining the spatial information associated with a series of crime sites, the CGT model produces a three-dimensional probability distribution termed a 'jeopardy surface', the 'height' of which at any point represents the likelihood of offender residence or workplace. The jeopardy surface is then superimposed on a street of the area of the crimes; such maps are termed 'geoprofiles' and use a range of colours to represent varying probabilities. A geoprofile can be thought of as a fingerprint of the offender's cognitive map"[149]. Geographic profiling is made up of two components – quantitative or objective and qualitative or subjective. "The subjective component of geographic profiling is based primarily on a reconstruction and interpretation of the offender's mental map"[150].

Geographic profiling approach has been criticized on many grounds. Many scholars have argued that Geographic profiling is not an approach on its own. Palermo and Kocsis, for instance, argued that "one pertinent issue to consider is the likely efficacy of geographic

[148] Id, at 161.

[149] Id at 162.

[150] Id, at 161.

profiling in contributing beyond what can be ascertained by common knowledge"[151]. Indeed geographic profiling seems to be more of an aid to the investigative psychology approach than an approach on its own. Palermo and Kocsis further maintained that "although geographic profiling as a technique appears potentially useful, it is perhaps best when supplemented by other investigatory measures that attempt to predict information that may assist in the detection and apprehension of an offender".[152]

Petherick contended that Rossmo "claimed that his profiling method requires a psychological profile before a geographic profile can be produced, yet he has been noted to have produced a geographic profile without a psychological profile"[153]. As such "the result of ignoring important behavioral and case context and not utilizing fully drawn profiles is that geographic profiling does not, and cannot, differentiate between two or more offenders operating in the same geographic area"[154].

Similarly, McGrath argued that "difficulties would include cases with a small number of known linked crimes and cases where linked crime scenes have not been identified or even discovered"[155]. "Also, the underlying theories are mostly drawn from databases related to burglaries and other crimes that may not translate well to the serial murderer or

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[151] Palermo and Kocsis, supra note 134, at 240.

[152] Id, at 242.

[153] Petherick, supra note 124, at 183.

[154] Id.

[155] Michael G. McGrath, "Criminal Profiling: Is there a Role for the Forensic Psychiatrist?", Journal of American Academy of Psychiatry and Law, Vol. 28, No. 3, 319 (2000).

rapist, and these theories relate to overall crime patterns, not individual crimes or crime series. Research on the connection between spatial coordinates and offender and victim variables continues, but at present, geographic profiling is probably best viewed as an adjunct to criminal profiling and not as a profiling process in and of itself"[156].

Geographic profiling is clearly a useful aid to crime investigation, but whether it qualifies as an approach on its own is a different matter. It does appear however, that geographic profiling is best construed as an aspect of the investigative psychology approach.

Behavioral Evidence Analysis (BEA)

Behavioral Evidence Analysis also known as the deductive method of criminal profiling was developed by Brent E. Turvey, an American forensic scientist. In 1999, and following his interview with Jerome Brudos, an American serial killer, Turvey noted that police case files differed from Brudo's own accounts, and therefore concluded that it is totally wrong to accept the premises on which the earlier profiling approaches based their profiles, and he came up with his new approach. Behavioral evidence analysis is primarily based on the availability of physical evidence. Turvey was very critical of the assumptions and inferences made by the other approaches (i.e. diagnostic evaluation, FBI approach and investigative psychology), and therefore argued that "a full forensic

[156] Id.

analysis must be performed on all available physical evidence before this type of profiling can begin"[157].

Fundamentally, Turvey maintained that BEA produces a deductive criminal profile as opposed to an inductive one. For him, "a deductive criminal profile is a set of offender characteristics that are reasoned from the convergence of physical and behavioral-evidence patterns within a crime or a series of related crimes. Pertinent physical evidence suggestive of behavior, victimology, and crime scene characteristics are included in the structure of a written profile to support any arguments regarding offender characteristics"[158]. On the other hand, Turvey sees an inductive criminal profile as "any method that describes, or bases its inferences on the characteristics of a typical offender type. This includes the employment of broad generalizations, statistical analysis, or intuition and experience"[159].

Turvey maintained that the information used to argue a deductive criminal profile includes the following.[160]

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[157] Turvey, supra note 27, at 29.

[158] Id, at 28.

[159] Turvey, supra note 9, at 686.

[160] Turvey, supra note 27, at 28.

(1) Forensic and Behavioral Evidence (Equivocal Forensic Analysis)

This involves the examination of any physical evidence that was gathered. It also includes an examination of victim and witness statements, crime scene photographs as well as crime scene reports.

(2) Victimology

This involves a detailed examination of background information about the victim. Here, the profiler should look at the victim's occupation, drug and alcohol use, hobbies, family, friends, and criminal records. It is believed that by studying the victim characteristics, that investigators and profilers may have an idea as to the motives of the crime. Similarly, the risk assessment level of the victim should also be carried out. It is generally accepted that prostitutes, for instance, carry a very high risk assessment level.

(3) Crime-scene characteristics

Here the profiler examines the crime scene to try and establish such things as the time of attack, type of weapons used, method of gaining entry, type of location, and other crime scene features. Anything that the offender said or did during the attack should also be noted. The profiler should also try to ascertain whether the crime scene is staged.[161] Then the criminal profile is produced.

Turvey further argued that deductive criminal profiling has two phases – investigative phase and the trial phase. "The investigative phase of criminal profiling generally

[161] Id, at 29.

involves behavioral analysis of the patterns of unknown offenders for known crimes"[162], while the trial phase "involves behavioral evidence analysis of known crimes for which there is a suspect or a defendant (sometimes a convicted defendant); this takes place in the preparation for both hearings and trials (criminal, penalty, and/or appeal phases of the trial are all appropriate times to use profiling technique"[163].

This approach has undoubtedly been criticized. Kocsis maintained that "there are however, some significant limitations in describing BEA as a distinct approach to profiling as it does not appear to be informed by a discreet substantive body of original empirical research. Instead, what BEA offers in some respects is a fusion of previous criminological literature on various forms of violent crime, the forensic sciences and philosophical concepts related to modes of reasoning, most notably, inductive vs deductive reasoning. BEA seems to hypothesize that a method of analysis is possible, whereby crimes may be interpreted for the purpose of profiling by adopting deductive reasoning processes as opposed to inductive ones. Given our current understanding of how the human mind functions and cognitively processes information in a heterogeneous fashion, some inherent difficulties exist with such a hypothesis.[164]

There is still debate as to whether BEA can be properly seen as an approach on its own. The point however, remains that BEA still cannot point to a special offender being

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[162] Id, at 35.

[163] Id, at 36.

[164] Kocsis, supra note 82, at xiv.

responsible for a certain crime, and also has not established any scientific basis. Turvey even admitted this and he wrote: "any discipline that involves interpreting the multi-dimensional nature of human behavior cannot be referred to as a hard science with a straight face. However, it does demonstrate that the deductive method of profiling can be informed by the same thinking strategies"[165]. Finally, there is an over-reliance on the availability of physical evidence by BEA.

Crime Action Profiling (CAP)

> In an analogous manner the research strands of CAP have studied both the behavioral patterns inherent to violent crimes (akin to psychology's study of mental disease) as well as the structure, processes, accuracy and skills related to constructing profiles (akin to the clinical practice of psychology). This is a distinguishing feature of CAP as other approaches to profiling have predominately focused solely on the study of offender typologies and have for the most part, largely ignored such issues related to the practical concept of constructing a profile.[166]

Crime Action Profiling was developed by Richard N. Kocsis, an Australian forensic psychologist . Based on his clinical knowledge and research literature, Kocsis maintained that profiling has its foundation in forensic psychology. "As a consequence, this conception of profiling assumes knowledge of human behavior and psychology such as

[165] Turvey, supra note 27, at 32.

[166] Kocsis, supra note 82, at xvi.

personality dynamics and human psychopathologies"[167]. Kocsis claimed that he became fully involved in offender profiling when he was approached by the Australian Police to assist them in a high profile serial murder case.

Crime action profiling, in the words of Kocsis "is used to describe and signify this process relating to the consideration of crime actions and the prediction, or profiling, of offender characteristics from those actions"[168]. Basically, crime action profiling tries to "examine offense behaviors independent of any inferred motivations"[169].

In analyzing patterns of crime behaviors, CAP uses the multi-dimensional scaling (MDS) method of statistical analysis. MDS is made up of various types and CAP uses the type called SYSTAT. This approach also uses cluster analysis, conical correlation and mathematical formulae to "plot the orientation of the offender characteristic vector arrows"[170].

Crime action profiling is the newest 'approach' to offender profiling and as such not a lot of reviews and research has been carried out. Nevertheless, CAP has contributed to the efforts to find a scientific basis to offender profiling.

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[167] Id, at xv.

[168] Id, at xvi.

[169] Palermo and Kocsis, supra 134, at 183.

[170] Id, at 220.

All the different approaches to offender profiling have their strengths and weaknesses, and it is only when they come together as a team that offender profiling will muster a scientific basis, gain general recognition in the various disciplines, and easily pass the *Daubert* legal admissibility test/standard. The greatest strength of the diagnostic evaluation approach lies in its ability to provide better explanations on the motivations underlying certain criminal actions. The FBI approach shows much strength in its various classification methods. The FBI's classification of offenders into organized and disorganized offenders and their classification of crime scenes and rapists have proved to be very useful. Investigative psychology's greatest strength is in its ability to apply psychological theories, and using statistical analysis, in trying to predict the residential location of serial offenders.

Chapter Three

Expert Testimony: The Conflicting Rules and Standards

> Under virtually all evidence codes, trial courts must evaluate the admissibility of proffered expert testimony. The manner in which they accomplish this task, however, varies greatly among jurisdictions. This variability revolves around two basic aspects of the admissibility determination. The first concerns the nature and rigor of the legal test to be applied. Courts differ substantially in the ways they define the judge's role concerning scientific evidence, with some adopting an active role in screening the evidence and others taking little or no responsibility to check the evidence. The second concerns the criteria used to assess the expertise under whatever legal test is adopted. Some courts use criteria that call for deference to the professional opinion of experts from the respective field, where as others assume the responsibility themselves to evaluate the scientific basis of the proffered opinion.[171]

The admissibility of any form of scientific evidence has always been problematic, full of controversy and inconsistencies. The introduction of scientific evidence into the courtroom can sway a case one way or the other. In fact, Peterson et al noted that "about one quarter of the citizens who had served on juries which were presented with scientific evidence believed that had such evidence been absent, they would have changed their verdicts – from guilty to not guilty."[172] The courts are fully aware of this and therefore, special rules have been adopted by many courts when deciding whether to admit or exclude any scientific evidence. New scientific techniques and fields of knowledge

[171] David L. Faigman., David H. Kaye., Michael J. Saks., and Joseph Sanders, Science in the Law: Standards, Statistics and Research Issues, 2 (2002).

[172] Joseph L. Peterson., John P. Ryan., Pauline J. Houlden, and Steven Mihajlovic, "The Use and Effects of Forensic Science in the Adjudication of Felony Cases", 32 J. FORENSIC SCI. 1730, 1748 (1987).

emerge and the court must be satisfied, not only that the witness is qualified, but whether such evidence should be given.[173] In fact, "admitting unreliable, unproven data can be as prejudicial as excluding sound evidence that is merely unfamiliar to the courts and society in general. Distinguishing between sound and unreliable evidence is especially problematic given the rapid developments in scientific knowledge and the possible appearance to those not educated in the area that scientific results are infallible. To keep pace with such a progressive area, the courts must be dynamic in their approach and accept new developments in these specialized areas."[174]

Many scholars have put forward the justifications for these special rules and admissibility hurdles that have to be overcome before presenting any scientific evidence. Friedland et al, for instance, have given four justifications for these special hurdles as follows: (1) an "aura of infallibility" surrounded the evidence so that a jury was unlikely independently to evaluate, or to be skeptical of, its worth; (2) scientific evidence relies on such arcane information that it will be very difficult for jurors to evaluate its worth, even if they are not "overawed" by any view of science as infallible; therefore, jurors just won't try, it being easier simply to take the expert's word; (3) the evidence is so unfamiliar to the courts that judges will have difficulty guiding juries on how fairly to evaluate it; and (4) the evidence "invades the province of the jury in a particularly powerful way, such as lie-detector test results determining for the jury who speaks "truth" and who does not".[175]

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[173] Steve Uglow, Evidence: Text and Materials, 619 (1997).

[174] Lisa Gonzalez, "The Admissibility of Scientific Evidence: The History and Demise of Frye v. United States", 48 U. Miami L. Rev. 371 (November 1992).

[175] Steven I. Friedland., Paul Bergman., and Andrew E. Taslitz, Evidence Law and Practice, 274 (2000).

Frye v. United States

In United States, the decision in *Frye v. United States*[176] (also known as the General Acceptance Rule) was the main rule that governed the admissibility of scientific evidence for seventy years (1923 – 1993). *Frye* is a 1923 decision by the United States Court of Appeals for the District of Columbia, in a case that involved the admissibility of opinion evidence derived from a systolic blood pressure deception test.

In this case, the defendant, James Alphonzo Frye was convicted of the murder of Dr. Robert W. Brown, in the second degree. During the trial, the defendant sought to introduce testimony based on systolic blood pressure deception test. This is the early form of the polygraph lie-detector test. The systolic blood pressure deception test is based on the theory that "truth is spontaneous, and comes without conscious effort, while the utterance of a falsehood requires a conscious effort, which is reflected in the blood pressure. The rise thus produced is easily detected and distinguished from the rise produced by mere fear of the examination itself. In the former instance, the pressure rises higher than in the latter, and is more pronounced as the examination proceeds, while in the latter case, if the subject is telling the truth, the pressure registers highest at the beginning of the examination, and gradually diminishes as the examination proceeds."[177]

It should be noted that before the trial, the defendant was subjected to this test and it showed that he was telling the truth when he denied that he committed the murder. He

[176] *Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923).*

[177] Id.

therefore, prayed the court to accept the testimony of Dr. William Moulton Martson (the inventor of the test), which supported his plea of innocence. The government counsel raised an objection which was sustained. The defense counsel further offered to have Dr. Martson conduct a new test in the presence of the jury, the government counsel again raised an objection, which was also sustained. The trial court excluded the testimony. The defendant was convicted and he appealed.

In their brief, counsel for the defendant, Richard V. Mattingly and Foster Wood, stated that:

> The rule is that the opinions of experts or skilled witnesses are admissible in evidence in those cases in which the matter of inquiry is such that inexperienced persons are unlikely to prove capable of forming a correct judgment upon it, for the reason that the subject-matter so far partakes of a science, art, or trade as to require a previous habit or experience or study of it, in order to acquire a knowledge of it. When the question involved does not lie within the range of common experience or common knowledge, but requires special experience or common knowledge, then the opinions of witnesses skilled in that particular science, art, or trade to which the question relates are admissible in evidence.[178]

In its ruling, the Court of Appeals affirmed the trial court's decision to exclude the testimony and held that "the systolic blood pressure deception has not yet gained such standing and scientific recognition among physiological and psychological authorities as would justify the courts in admitting expert testimony deduced from the discovery,

[178] Id.

development, and experiments thus far made."[179] Fundamentally, the court stated that scientific evidence is admissible if is generally accepted that the methods and principles underlying it had achieved widespread acceptance in the relevant discipline. Justice Van Orsdel, delivering the opinion of the Court, stated that:

> Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.[180]

The Court in *Frye* did not cite any authority in formulating the new rule. This decision raised several questions. What exactly was the "thing" that must be sufficiently established? What is the "relevant scientific community"? Who defines it? How do judges determine "general acceptance"? Does *Frye* require that general acceptance within the scientific community be established by disinterested scientists?[181]

The *Frye* test became the main rule governing the admissibility of scientific evidence but courts and scholars battled with answers to the above questions. Starrs maintained that "the *Frye* court does not inform us in what way the expert testimony proffered in the trial court was defective. Surely it was unacceptable for lack of general acceptance. But what

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[179] Id.

[180] Id.

[181] Melissa M. Horne, "Novel Scientific Evidence: Does Frye require that General Acceptance within the Scientific Community be Established by Disinterested Scientists?", 65 U. Det. L. Rev. 147 (Fall 1987).

precisely was not generally accepted? Was it the validity of the principle that deception is reflected in discernible changes in the blood pressure of the prevaricator? Or was it, rather, the validity of the systolic blood pressure test (the sphygmomanometer) to detect such alterations in blood pressure?"[182].

Identifying what relevant community a technique falls also proved very problematic, and courts battled to arrive at an acceptable way. The identification of the discipline to which the "thing" falls is a very determinative factor in any trial involving scientific evidence. Thus, "if the relevant scientific field requirement is construed broadly, the *Frye* test acts as a formidable barrier to admissibility. In *Cornet v. State,*[183] for example, the relevant scientific community for purposes of spectrograph (voiceprint) analysis was held to include engineers, linguists, and psychologists, as well as those who use voice spectrography for identification purposes. Because different disciplines do not share a common view of a particular scientific method, the burden of establishing general acceptance is undoubtedly onerous. Consequently, the broader the construction of the relevant scientific field, the less likely the party will be able to utilize the novel scientific evidence"[184].

On a similar vein, Moenssens noted that "some courts have determined the proper field without difficulty, but other courts have had difficulty with this step of the analysis.

[182] James E. Starrs, "A Still-Life Watercolor: Frye v. United States", Journal of Forensic Sciences, Vol. 27, No. 3, 686 (July 1982).

[183] *Cornet v. State, 450 N.E. 2d 498 (Ind. 1983).*

[184] Thaddeus Murphy, "The Admissibility of Scientific Evidence in Illinois", 21 Loy. U. Chi. L. J. 935, 943 (Spring 1990).

Occasionally, new techniques compound the problem by combining elements of several disciplines, with no discipline claiming the novel process as its own. An imaginative expert who develops a new technique may be considered radical by his conservative peers, who may reject the technique regardless of its validity. Alternatively, a discipline may accept a new technique simply because the technique promotes the overall objectives of the discipline. The discipline might accept the new technique, therefore, without requiring objective scientific validation of the underlying postulates."[185] Moenssens gave the example of sound spectrographic voice identification technique where there were arguments as to which field the technique should be generally accepted. Is it the field of radio communications, speech and audiology, fingerprint identification, or voice examination?[186]

As we mentioned earlier, the Court of Appeals in *Frye* did not cite any authority or give any explanations/justifications for formulating the general acceptance rule. Other courts however, have defended the decision and offered some justifications. In fact, three major court rulings have justified *Frye* and stated the advantages of the rule.

First, in *United States v. Addison,*[187] the Court stated that the *Frye* test ensures that there exist a minimal reserve of experts who can examine the validity of any scientific evidence. The case involved two defendants – Roland Addison and Henry Raymond, who

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[185] Andre A. Moenssens, "Admissibility of Scientific Evidence – An Alternative to the Frye Rule", 25 Wm. & Mary L. Rev. 545, 548 (Summer 1984).

[186] Id, at 549.

[187] *United States v. Addison, 498 F. 2d 741 (D.C. Cir. 1974).*

were both convicted by the United States District Court for the District of Columbia. They were both convicted of assault with intent to kill while armed, and assault on a member of the police force with a dangerous weapon. Henry Raymond was additionally charged and convicted of carrying a dangerous weapon.

During the trial, the government counsel proffered evidence of voice print analysis (spectrographic identification) that proved that the defendant, Raymond made the telephone call to which a police officer, Sergeant Wilkins was responding when he was shot. Lieutenant Ernest Nash, a voice technician at the Michigan State Police Department, gave expert testimony that the voice print analysis showed that Raymond made the call that led the police officer to the scene where he was shot. It should be noted that Raymond raised an objection to the order requiring him to submit his voice sample for analysis. He argued that the order violated his Fourth Amendment right to privacy. He also contended that he was deprived of effective assistance of counsel because his counsel was denied adequate time to consider the new scientific technique and the associated novel issues.

In its ruling, the Court of Appeals held that the District Court erred in admitting the voice print analysis evidence. The Court also ruled, however, that the jury's judgment was not substantially swayed by the error and therefore affirmed the conviction. The Court held that "spectrographic identification of defendant as maker of telephone call to which police officer was responding when shot was not sufficiently accepted by scientific community as a whole to form a basis for jury's determination of guilt or innocence, and

was inadmissible, but erroneous admission of testimony based on spectrogram did not fatally infect jury's verdict and did not require reversal, in light of overwhelming evidence of guilt."[188]

Circuit Judge, McGowan, stated that the decision in *Frye v. United States* was "the standard by which questions of admissibility of expert testimony based on new methods of scientific measurements are to be resolved."[189] The Court defended *Frye* and stated that:

> The requirement of general acceptance in the scientific community assures that those most qualified to assess the general validity of a scientific method will have the determinative voice. Additionally, the *Frye* test protects prosecution and defense alike by assuring that a minimal reserve of experts exists who can critically examine the validity of a scientific determination in a particular case. Since scientific proof may in some instances assume a posture of mystic infallibility in the eyes of a jury of laymen, the ability to produce rebuttal experts, equally conversant with the mechanics and methods of a particular technique, may prove to be essential.[190]

In *People v. Kelly,*[191] another case that involved voice print analysis, the Supreme Court of California also justified the decision in *Frye*, stating that the *Frye* test ensures uniformity of judicial decisions. The case involved Robert Emmett Kelly who was convicted of extortion by the Superior Court, Orange County, California. The extortion arose from several anonymous and threatening telephone calls that the defendant made to

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[188] Id.

[189] Id, at 743.

[190] Id, at 744.

[191] *People v. Kelly, 17 Cal. 3d 24, 549 P. 2d 1240 (1976).*

Terry Waskin. The police, with Waskin's consent, tape-recorded two of the telephone calls. A police informant later identified the defendant as the person whose voice was on the tapes. The defendant's voice examplar and the two tape recorded calls were sent to Lieutenant Ernest Nash, the voice print analysis technician at Michigan State Police Department for analysis. Lt. Nash concluded that the voices on the tapes were that of the defendant, and he was allowed to testify. The trial court ruled that voice print analysis has achieved sufficient scientific acceptance and therefore the expert's testimony was admissible. Kelly was convicted and he appealed.

The defendant argued that (1) Lieutenant Nash, the voice print expert, failed to sufficiently establish that the technique has achieved general acceptance in the scientific community; (2) that Lt. Nash was not qualified as an expert, and, (3) that the procedure was not carried out in a fair and impartial manner. In its ruling, the Supreme Court of California stated that voice print analysis had not achieved general scientific acceptance as a reliable technique and that the trial court erred in admitting the testimony. The Court therefore, reversed the judgment of conviction. The Court held that the "testimony by police officer who was head of voice identification unit for a state police force and who had extensive experience with voice print analysis was insufficient to establish that the voice print was generally regarded as reliable in the scientific community; and that error in admission of the testimony was not harmless."[192]

[192] Id.

The Supreme Court of California, in reversing the judgment also stated that, "we have expressly adopted the foregoing *Frye* test and California courts, when faced with a novel method of proof, have required a preliminary showing of general acceptance of the new technique in the relevant scientific community. ... we are satisfied that there is ample justification for the exercise of considerable judicial caution in the acceptance of evidence developed by new scientific techniques."[193]

The Court re-stated the United States Court of Appeals for the District of Columbia's decision in *United States v. Addison*[194] and added that:

> Moreover, a beneficial consequence of the *Frye* test is that it may well promote a degree of uniformity of decision. Individual judges whose particular conclusions may differ regarding the reliability of a particular scientific evidence, may discover substantial agreement and consensus in the scientific community."[195]

Hence, "for all the foregoing reasons, we are persuaded by the wisdom of, and reaffirm our allegiance to, the *Frye* decision and the "general acceptance" rule which that case mandates."[196]

The third major case where a court justified the decision in *Frye* was in *Reed v. State,*[197] where the Court of Appeals of Maryland stated that *Frye* ensures judicial economy, by

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[193] Id, at 1244.

[194] *United States v. Addison, 498 F.2d 741 (D.C. Cir. 1974).*

[195] *People v. Kelly, 17 Cal. 3d 24, 549 P. 2d 1244, 1245 (1976).*

[196] Id, at 1245.

[197] *Reed v. State, 283 Md. 374, 393 A. 2d 364 (1978).*

avoiding the time-consuming examination and cross-examination of witnesses. In this case, the defendant James Reed was convicted of rape, unnatural and perverted sex acts, robbery, verbal threats, and unlawful use of telephone, by the Circuit Court, Montgomery County in Maryland. The facts of the case are that in September 1974, a woman was raped outside her home in Montgomery County, Maryland. She reported the rape to the police. The following day, she received a telephone call from a man saying that he was the person who raped her. She immediately called the police, and it was decided that her telephone calls should be tape-recorded in case the assailant called again. As the police predicted, the assailant called several times within three days. During one of the telephone calls, the assailant told the woman that he would like to have sexual intercourse with her again, but the woman said no, and offered to pay the assailant $1,000 dollars so that he can leave her alone. The assailant called again to accept the offer and instructed her to go and leave the money inside one of the lockers in the locker room of the Greyhound Bus Station in the District of Columbia. By this time, the police put the locker room under surveillance and when the assailant came to collect the money, he was arrested.

During the trial, the defendant was ordered to submit a voice examplar, which was then sent to the voice identification unit at Michigan State Police Department for analysis. The defendant's voice examplar was compared to those recorded on the tapes, but the results were deemed inconclusive. The defendant was ordered to submit another voice examplar and the second voice print analysis showed that there is a match. The voice print expert was allowed to testify in court identifying Reed as the person who made the calls. The

jury could not reach a decision after two and half days of deliberation, and a mistrial was declared. However, there was a retrial in March 1976 and Reed was convicted. The defendant appealed, arguing that the voice print analysis should not have been admitted because the technique is not generally accepted by the scientific community as being sufficiently reliable; and also that the second request for his voice examplar is a violation of the Best Evidence Rule.

The Court of Appeals of Maryland reversed the judgment of conviction and remanded with directions. It was held that "testimony based on "voiceprints" or spectrograph is inadmissible in Maryland courts as evidence of voice identification because, at the present time, such technique has not reached the required standard of acceptance in the scientific community."[198] The Court went on to justify the *Frye* test and stated that:

> Without the *Frye* test or something similar, the reliability of an experimental scientific technique is likely to become a central issue in each trial in which it is introduced, as long as there remains serious disagreement in the scientific community over its reliability. Again and again, the examination and cross-examination of expert witnesses will be as protracted and time-consuming as it was at the trial in the instant case, and proceedings may well degenerate into trials of the technique itself. The *Frye* test is designed to forestall this difficulty as well.[199]

The *Frye* test standard has been adopted by many states. It should be noted however, that *Frye* has faced a lot of criticisms. First, *Frye* has been criticized because it did not "cite

[198] Id.

[199] Id.

any policy justification for the general acceptance standard: the court merely mandated the standard as ipse dixit."[200]

"Another asserted weakness of the *Frye* approach concerns the difficulty of ascertaining when a scientific proposition has been generally accepted. The test does not specify what proportion of experts constitute general acceptance. Courts have never required unanimity, and anything less than full consensus in science can quickly resemble substantial disagreement. In fact, the most rigorous fields with the healthiest scientific discourse might fail the *Frye* test with the greatest frequency. In light of the skeptical perspective of good scientific investigation, judges should be cautious when they approach a field in which there is too much agreement."[201]

> Moreover, the *Frye* test requires general acceptance in the particular field. But there are no standards defining which field to consult. Courts have had considerable difficulty assessing scientific information under this standard because it often extends into more than one academic or professional discipline. Furthermore, each field may contain subspecialities. This difficulty leads to paradoxical results. General acceptance, often criticized for being the most conservative test of admissibility, in practice can produce the most liberal standards of admission. The more narrowly a court defines the pertinent field, the more agreement it is likely to find. The general acceptance test thus degenerates into a process of deciding whose noses to count. The definition of the pertinent field can be over-inclusive or under-inclusive. Because the pertinent field can

[200] Edward J. Imwinkelried, "The Importance of Daubert in Frye Jurisdictions", 42 Crim. Law Bulletin 5 (March – April 2006).

[201] Faigman, Kaye., Saks. and Sanders, supra note 171, at 8.

> be so readily manipulated, the test by itself provides courts with little protection against shoddy science.[202]

Faigman et al further argued that "under the *Frye* variant, because the courts have to rely on the standards set within each field, they find themselves accepting more readily the offerings of less rigorous fields and less readily the offerings of more rigorous fields. Fields that set higher thresholds will place a smaller proportion of their knowledge over the threshold."[203]

Frye has also been criticized as being conservative. *Frye* appeared to exclude relevant and reliable expert evidence until it has been generally accepted by the relevant scientific community. Maletskos and Spielman argued that "a literal reading of *Frye v. United States* would require that the courts always await the passing of a 'cultural lag' during which period the new method will have had sufficient time to diffuse through scientific discipline and create a requisite body of scientific opinion needed for acceptability."[204]

Faigman et al also argued that *Frye* "imposes a protracted waiting period that valid scientific evidence and techniques must endure before gaining legal acceptance."[205] They argued that "this criticism highlights the fact that all significant scientific findings gestate before they are accepted by the general scientific community: During this time period

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[202] Id, at 9.

[203] Id, at 10.

[204] Constantine J. Maletskos., and Stephen J. Spielman, Introduction of New Scientific Methods in Court, Law Enforcement Science and Technology, 957, 958 (S.A. Yefsky. Ed. 1967).

[205] Faigman, Kaye, Saks and Sanders, supra note 171, at 8.

courts and the parties before them are deprived of this work. Moreover, many critics also note the "nature" of the scientific enterprise which sometimes responds negatively to revolutionary findings, because they might threaten entrenched "paradigms" and thus entrenched scientists. Proponents of this view observe that the opinions of a scientist heralded today as brilliant, but dismissed in his day as misguided or worse, would be excluded under a general acceptance test. Galileo, for example, or Einstein early in his career, would not have been allowed to testify because of the radical nature of his views."[206]

In a similar vein, Giannelli maintained that:

> *Frye* envisions an evolutionary process leading to the admissibility of scientific evidence. A novel technique must pass through an "experimental" stage in which it is scrutinized by the scientific community. Only after the technique has been tested successfully in this stage and has passed into the "demonstrable" stage will it receive judicial recognition. What is unique about the *Frye* opinion is the standard it establishes for distinguishing between the experimental and demonstrable stages. In contrast to the relevancy approach, it is not enough that a qualified expert, or even several experts, believes that a particular technique has entered the demonstrable stage; *Frye* imposes a special burden – the technique must be generally accepted by the relevant scientific community.[207]

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[206] Id.

[207] Paul C. Giannelli, "The Admissibility of Novel Scientific Evidence: Frye v. United States, a Half-Century Later", 80 Colum. L. Rev.1197, 1205 (1980).

A case in point is *Coppolino v. State,*[208] where the Court of Appeals of Florida rejected the *Frye* test and was critical of the general acceptance rule. The defendant, Dr Carl Coppolino, an anesthesiologist, was charged with the murder of his wife Carmela Coppolino by poisoning. From the beginning, there was evidence showing that Coppolino had bought some quantity of a substance called succinylcholine chloride, about three months before the murder of his wife. During the trial, both the defense and prosecution offered medical and scientific witnesses regarding the cause of death. The expert witnesses for the State included Dr. Helpern (a pathologist), Dr. Umberger (a toxicologist), Dr. La Du, and Dr. Cleveland. In his testimony, Dr. Helpern said that his autopsy on the victim showed that she was in good health at the time of death. He also said that even though the autopsy was inconclusive as to the cause of death, that he found a needle injection tract in the left buttock of the deceased. He therefore, called Dr. Umberger to perform chemical analysis and tests on the body tissues.

At the time of the trial, there were no known medical or scientific methods for detecting the substance (succinic acid) in body tissues, but Dr. Umberger used various procedures and was able for the first time in medical history to detect succinic acid in the body tissue.

> Dr. Umberger testified that he first performed a "general unknown" test which was designed to disclose the presence of certain drugs and poisons in the body tissue. The results of this "general unknown" test were negative. Dr Umberger then attempted to establish a method whereby he could determine if unusual amounts of the component parts of succinylcholine chloride were present in the body issue. Dr. Umberger testified that some of his tests and procedures were standard ones and that some

[208] *Coppolino v. State, 223 So.2d 68 (Fla. App. 1968).*

> were new. As a result of his tests Dr. Umberger reached the conclusion, so testified, that Carmela Coppolino received a toxic dose of succinylcholine chloride.[209]

It should be noted that when Dr. Helpern was recalled, he testified that based on the autopsy and on Dr. Umberger's findings that he concluded that the victim died from an overdose of succinylcholine chloride. Dr. La Du also testified that he found a minute quantity of succinylcholine chloride at the needle injection tract on the victim's left buttocks, and therefore, was of the opinion that the victim died as a result of the succinylcholine chloride. Dr. Cleveland also testified that based on the negative findings in Dr. Helpern's autopsy report and the positive findings of Dr. Umberger, he was of the opinion that the victim died as a result of an overdose of succinylcholine chloride.

It should also be noted that the State called Marjorie Farber to testify. She was Dr. Carl Coppolino's lover between 1962 and 1964 during which time the defendant was married to the victim. She testified that the defendant made certain incriminating statements regarding the death of his wife during the time they had an affair. The defense raised an objection but it was denied, and the testimony was admitted. The defendant called several expert witnesses who testified that it was "impossible by medical scientists to demonstrate the presence of succinylcholine chloride or its component parts in the body". The defendant was however, convicted and he appealed. The defendant argued among other things that:

(1) The scientific tests performed by Dr. Umberger were unreliable and scientifically unacceptable, that their admission into evidence was error.

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[209] Id, at 69.

(2) The trial court committed reversible error by instructing the jury on second and third degree murder and manslaughter.

(3) The trial judge erred by admitting into evidence the testimony given by Marjorie Farber.

In its ruling, the Court of Appeals of Florida, Second District, affirmed the trial court's judgment and held that the defendant had failed to show that the trial judge abused his discretion. It was also held that the trial court's instruction of the jury on the second and third degree murder and manslaughter was not an error because under the authority of Fla. Stat. Ch. 919.14, the jury was permitted to find defendant guilty of the degree charged or lesser degree. The Court however, held that the trial court erred by admitting the testimony given by Marjorie Farber. The Court stated that "we believe that the testimony in question was irrelevant to the proper issues of the case, that its sole effect was to attack the character of the accused and that the trial court erred by admitting it into evidence. However, the fact that an error was committed in admitting testimony does not automatically result in reversal, there must be a showing that such error was harmfully prejudiced."[210]

The Court of Appeal further stated that:

> The tests by which the medical examiner sought to determine whether death was caused by succinylcholine chloride were novel and devised specifically for this case. This does not render the

[210] Id, at 72.

> evidence inadmissible. Society need not tolerate homicide until there develops a body of medical literature about some particular lethal agent. The expert witnesses were examined and cross-examined at great length and the jury could either believe or doubt the prosecution's testimony as it chose.[211]

The *Frye* test has also been criticized for leading to inconsistencies. Moenssens argued that "the *Frye* rule has different meanings for forensic scientists, prosecutors, defense attorneys, and judges. To forensic scientists and prosecutors, the *Frye* rule is an obstacle that often excludes evidence based on novel scientific techniques. Although the *Frye* rule also prevents the defendants' novel scientific evidence from reaching the jury, defense attorneys and the few forensic scientists who work with the defense bar see the rule as an ineffective barrier to unreliable prosecution evidence. The meaning of the *Frye* rule to judges is less clear. Many judges do not perceive the rule as a significant issue."[212]

Another criticism leveled against the *Frye* test is its inflexibility, confusion of issues, and superfluity.[213] McCormick argued that "procedures that operate within the framework of general relevancy and expert testimony rules offer a more meaningful and effective alternative. The values sought to be protected by *Frye* can be preserved without the cost of its disadvantages. Factors that directly address the merit of new scientific developments can be identified and delineated. They incorporate concepts that judges understand and routinely use. At the same time, the rules allow necessary flexibility by

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[211] Id, at 75.

[212] Moenssens, supra note 185, at 545.

[213] Mark McCormick, "Scientific Evidence: Defining a New Approach to Admissibility", 67 Iowa L. Rev. 879, 915 (1981-1982).

turning the decision on the characteristics of the evidence as well as the characteristics of the particular case. The relevant factors sharpen and define precise issues that should affect the admissibility decision."[214]

It has also been argued that by focusing particularly on general acceptance, *Frye* obscures other critical problems in the use of a particular technique.[215] Giannelli gave the admissibility of neutron activation analysis (NAA) as an example, arguing that "under the *Frye* courts have concentrated primarily on the general acceptance of NAA" and that "this approach tends to conceal the most critical aspects of NAA – whether, as interpreted, the results of the test are relevant to the issues in dispute."[216]

Following the criticisms of the *Frye* test, some scholars have suggested alternative rules for admitting scientific evidence. Professor McCormick for instance, argued that the "relevancy test" is an appropriate standard. He maintained that:

> General scientific acceptance is a proper condition upon the court's taking judicial notice of scientific facts, but not a criterion for the admissibility of scientific evidence. Any relevant conclusions which are supported by a qualified expert witness should be received unless there are other reasons for exclusion. Particularly, its probative value may be overborne by the familiar dangers of prejudicing or misleading the jury, unfair surprise and undue consumption of time. On this footing the novelty and want of acceptance at that time of the lie-detector lessened the probative value of the test and probably heightened the danger of misleading the jury. If the courts had used this approach, instead of repeating a supposed

[214] Id, at 916.

[215] Giannelli, supra note 207, at 1226.

[216] Id.

> requirement of "general acceptance" not elsewhere imposed, they might have arrived at some practical way of utilizing a technique of investigation which has proved so fertile as a means of ascertaining truth.[217]

Fundamentally, McCormick argued that any scientific evidence should be admitted if it is relevant to the facts of the case and if an expert testifies to its validity. Many scholars and courts were very critical of this suggestion. In fact, the Court of Appeals of Maryland in *Reed v. State*[218] addressed this suggestion from Professor McCormick. The Court stated that judges and jurors are not equipped to assess the reliability of scientific techniques when scientists disagree on the issue. The Court stated that:

> This view seems to us unacceptable. It fails to recognize that laymen should not on a case by case basis resolve a dispute in the scientific community concerning the validity of a new scientific technique. When the positions of the contending factions are fixed in the scientific community, it is evident that controversies will be resolved only by further scientific analysis, studies and experiments. Juries and judges, however, cannot experiment. If a judge or jurors have no foundation, either in their experience or in the accepted principles of scientists, on which they might base an informed judgment, they will be left to follow their fancy. Thus, courts should be properly reluctant to resolve the disputes of science. "It is not for the law to experiment but for science to do so," *State v. Cary*, supra, 99 N. J. Super. at 332, 239 A. 2d at 684.[219]

Professor Richardson also called for the substitution of "general acceptance" by "substantial acceptance." "Is the basis of admissibility to be universal acceptance by

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[217] Charles T. McCormick, Handbook of the Law of Evidence, 363 (1954).

[218] *Reed v. State, 283 Md. 371. A.2d 364 (1978).*

[219] Id.

scientific thought? Is it to be general acceptance by science? Or is it to be substantial acceptance which gives a reliable degree of credibility?"[220] Many scholars are not in support of substituting "general acceptance with "substantial acceptance'. Murphy argued that substantial acceptance is not any less amorphous or difficult to define as general acceptance.[221]

The establishment of a "Science Court" has also been suggested by Dr. Arthur Kantrowitz, an American Scientist. He called for the establishment of a "Science Court" to screen any new scientific technique before it is introduced into the courtroom.[222] The reasons for creating a science court are the "need for accurate information to serve as a basis for deciding basic policy questions"[223] and the need for an institution that will "limit to the power exercised by scientists."[224] The science court will also "eliminate the opportunity for policymakers to hide policy decisions behind scientific conclusions,"[225] as well as helping to ensure that "discredited claims should be identified, especially when they arise in the course of public debate."[226]

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[220] James R. Richardson, Modern Scientific Evidence: Civil and Criminal, 2nd ed, 24 (1974).

[221] Murphy, supra note 184, at 967.

[222] Arthur Kantrowitz, "Controlling Technology Democratically", 63 AM. SCI. 505 (1975).

[223] James A. Martin, "The Proposed "Science Court", 75 Mich. L. Rev. 1058, 1059 (1977).

[224] Id.

[225] Id, at 1060.

[226] Id.

Professor Giannelli maintained that the advantages of such a panel of experts and tribunals are that the screening will be done by a group of scientists, that their evaluations would be carried out by a group of scientists who have no financial or professional interests in the technique, thereby solving the problem of partiality.[227]

However, the creation of a science court has been described as time consuming and inconclusive.[228] Justice Bazelon supports the goals of a science court but finds some of the court's features worrying. He maintained that a science court will be time consuming, arguing that "a lengthy adversary proceeding, limited solely to factual issues, might well exaggerate the importance of those issues, and might tend to diminish the importance of the underlying value choices. A factual decision by a Science Court, surrounded by all the mystique of both science and the law, might well have enormous, and unwarranted, political impact."[229] "Moreover, it is not entirely clear to me that all disputes among either could or should be "resolved." Experts usually disagree not so much about the objectively verifiable facts, but about the inferences that can be drawn from those facts. And they disagree precisely because it is impossible to say with certainty which of those inferences are "correct."[230]

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[227] Giannelli, supra note 207, at 1232.

[228] Justice David L. Bazelon, "Coping with Technology Through the Legal Process", 62 Cornell Law Review, 817, 827 (June 1977).

[229] Id.

[230] Id.

In the final analysis, it should be noted that none of these suggested alternatives to *Frye* was adopted. It seems that the *Frye* test has come to stay. In fact, *Frye* remained the main rule governing the admissibility of scientific evidence even after the enactment of the Federal Rules of Evidence in 1975. As at today *Frye* is still the main admissibility rule in many states. It is also noteworthy to point out that *Frye* has been adopted by arguably all the highly litigious states like California, New York and Florida.[231]

The Federal Rules of Evidence

The Federal Rules of Evidence goes as far back as 1961 when Chief Justice Earl Warren appointed a Special Committee on Evidence, charged with the responsibility of finding out how feasible and desirable a uniform code of evidence will be for federal courts. In 1962, the Special Committee recommended the adoption of federal rules of evidence. Chief Justice Earl Warren therefore, appointed an Advisory Committee in 1965 to draft the rules of evidence. In 1969, the first draft was published. A revised draft was also published in 1971. In 1972, the United States Supreme Court promulgated the Federal Rules of Evidence. It should be noted that:

> Unlike prior procedural Rules, however, when the Supreme Court promulgated the Federal Rules of Evidence on November 20, 1972, questions were raised concerning the Court's authority to prescribe certain Rules. The Rules were promulgated pursuant to congressional enabling

[231] For full details of all the states and the rules they have adopted, please see; David E. Berstein., and Jeffrey D. Jackson, "The Daubert Trilogy in the States", 44 Jurimetrics 351 (2004). 351 – 366., Joseph R. Meaney, "From Frye to Daubert: Is a Pattern Unfolding?", 35 Jurimetrics J. 191 (1995) 191 – 199., Heather G. Hamilton, "The Movement from Frye to Daubert: Where do the States Stand?", 38 Jurimetrics 201 (1998) 201 – 213.

> authority granting the Supreme Court the power to prescribe rules governing the practice and procedure of federal courts, provided that such Rules did not "abridge, enlarge, or modify any substantive right". Critics closely scrutinized several of the Rules promulgated by the Supreme Court in an effort to determine whether the Court had exceeded its authority under the Enabling Act by prescribing rules that were outside the scope of "practice and procedure". The debate over whether the Supreme Court had exceeded its power became moot, however, when Congress intervened in the process with legislation stipulating that the Federal Rules of Evidence would not take effect until they were expressly approved by Congress. While Congress thereafter revised the Supreme Court's version of the Rules in specific, isolated provisions, it did not reconstruct the design of the Rules. Its modifications were limited to the revision of the specific text of discreet provisions of the Federal Rules of Evidence, and the vast majority of the Supreme Court's version of the Federal Rules of Evidence, as well as the integrity of the structure of the Rules, were left intact by Congress when the rules became effective on January 1975.[232]

Congressional hearings took place between 1973 and 1974. The House of Representatives completed their hearings in February 1974 and the Senate in November 1974. It was then sent to President Gerald Ford who signed the Rules into law on January 2, 1975. The Federal Rules of Evidence took effect on July 1, 1975.

Rule 702 of the Federal Rules of Evidence governs the admissibility of expert testimony.

Rule 702 states that:-

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert

[232] Glen Weissenberger, "The Supreme Court and the Interpretation of the Federal Rules of Evidence", 53 Ohio St. L. J. 1307, 1319 (1992).

by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise.[233]

Rules 401, 402, 403, 703, 704 and 705 also affect the admissibility of expert scientific testimony. It is therefore, very important to cite them at length.[234]

Rule 401. Definition of "Relevant Evidence". "Relevant evidence" means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence."[235]

Rule 402. Relevant Evidence Generally Admissible; Irrelevant Evidence Inadmissible. "All relevant evidence is admissible, except as otherwise provided by the Constitution of the United States, by Act of Congress, by these rules, or by other rules prescribed by the Supreme Court pursuant to statutory authority. Evidence which is not relevant is not admissible."[236]

Rule 403. Exclusion of Relevant Evidence on Grounds of Prejudice, Confusion, or Waste of Time. "Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues,

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[233] Fed. R. Evid. 702

[234] These Rules are also very important to our subsequent discussions.

[235] Fed. R. Evid. 401

[236] Fed. R. Evid. 402

misleading the jury, or by consideration of undue delay, waste of time, needless presentation of cumulative evidence.

(a) Character evidence generally. Evidence of a person's character or trait of character is not admissible for the purpose of proving action in conformity therewith on a particular occasion, except:

(1) Character of accused. Evidence of a pertinent trait of character offered by an accused, or by the prosecution to rebut the same, or if evidence of a trait of character of the alleged victim of the crime is offered by an accused and admitted under Rule 404 (a)(2), evidence of the same trait of character of the accused offered by the prosecution;

(2) Character of alleged victim. Evidence of a pertinent trait of character of the alleged of the crime offered by an accused, or by the prosecution to rebut the same, or evidence of a character trait of peacefulness of the alleged victim offered by the prosecution in a homicide case to rebut evidence that the alleged victim was the first aggressor;

(3) Character of witness. Evidence of the character of a witness, as provided in rules 607, 608, and 609.

(b) Other crimes, wrongs, or acts. Evidence of other crimes, wrongs, or acts is not admissible to prove the character of a person in order to show action in conformity therewith. It may, however, be admissible for other purposes, such as proof of motive, opportunity, intent, preparation, plan, knowledge, identity, or absence of mistake or accident, provided that upon request by the accused, the

prosecution in a criminal case shall provide reasonable notice in advance of trial, or during trial if the court excuses pretrial notice on good cause shown, of the general nature of any such evidence it intends to introduce at trial."[237]

Rule 703. Bases of Opinion Testimony by Experts. "The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences, upon the subject, the facts or data need not be admissible in evidence in order for the opinion or inference to be admitted. Facts or data that are otherwise inadmissible shall not be disclosed to the jury by the proponent of the opinion or inference unless the court determines that their probative value in assisting the jury to evaluate the expert's opinion substantially outweighs their prejudicial effect."[238]

Rule 704. Opinion on Ultimate Issue. (a) "Except as provided in subdivision (b), testimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact.

(c) No expert witness testifying with respect to the mental state or condition of a defendant in a criminal case may state an opinion or inference as to whether the defendant did or did not have the mental state or condition constituting an element

[237] Fed. R. Evid. 403

[238] Fed. R. Evid. 703.

of the crime charged or of a defense thereto. Such ultimate issues are matters for the trier of fact alone."[239]

Rule 705. Disclosure of Facts or Data Underlying Expert Opinion. "The expert may testify in terms of opinion or inference and give reasons therefor without first testifying to the underlying facts or data, unless the court requires otherwise. The expert may in any event be required to disclose the underlying facts or data on cross-examination."[240]

The adoption of the Federal Rules of Evidence in 1975 raised one key question – did the Federal Rules supersede the *Frye* test? This question was not addressed either in the Advisory Committee Notes, the Congressional Hearing Committee Reports or during the Congressional hearings. Trial courts were left to decide for themselves. Many courts continued with *Frye*, some adopted the new Federal Rules, and some combined the two rules.

In *United States v. Smith,*[241] for instance, the court continued with the *Frye* test while at the same time recognized the authority of the Federal Rules of Evidence. Delivering the opinion of the Court of Appeals, Circuit Judge, Kanne said: "although the validity of the judge-made rule in *Frye* has been criticized by some courts and commentators for

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[239] Fed. R. Evid. 704.

[240] Fed. R. Evid. 705

[241] *United States v. Smith, 869 F. 2d 348 (7th Cir. 1989).*

numerous reasons, this circuit has continued to affirm (and to apply) the *Frye* standard."[242]

In *United States v. Downing,*[243] the court rejected *Frye* and adopted the new Federal Rules of Evidence. The Third Circuit Court stated that *Frye* was inconsistent with the Federal Rules of Evidence based upon the Rules' broad scope of relevance. In this case, the Court of Appeals, through Circuit Judge Becker, held that, "the balance of this section is devoted to a discussion of the perceived evidentiary problems posed by novel forms of scientific expertise, generally, and to an analysis of the test announced in *Frye v. United States*, 293 Fed. 1013 (D.C. Cir. 1923), as a way of dealing with those test problems. We conclude that the status of the *Frye* test under Rule 702 is somewhat uncertain, but reject that test for reasons of policy. In section 1V, we set forth an alternative standard for evaluating novel scientific evidence that we believe comports with the language and policy of Rule 702."[244] "We reject the *Frye* test."[245]

The Court of Appeals further stated that:

> In sum, the *Frye* test suffers from serious flaws. The test has proved to be too malleable to provide the method for orderly and uniform decision-making envisioned by some of its proponents. Moreover, in its pristine form the general acceptance standard reflects a conservative approach to the admissibility of scientific evidence that is at odds with the spirit, if not the precise language, of the Federal Rules of

[242] Id, at 351.

[243] *United States v. Downing, 753 F. 2d 1224, 1224 (3d Cir. 1985).*

[244] Id, at 1232.

[245] Id, at 1233.

> Evidence. For these reasons, we conclude that "general acceptance in the particular field to which [a scientific technique] belong," should be rejected as an independent controlling standard of admissibility. Accordingly, we hold that a particular degree of acceptance of a scientific technique within the scientific community is neither a necessary nor a sufficient condition for admissibility; it is, however, one factor that a district court normally should consider in deciding whether to admit evidence based upon the technique.[246]

In *State v. Kersting,*[247] it was held that "scientific evidence which is not generally accepted may nevertheless be admitted if there is credible evidence on which the trial judge can rely in making the initial determination that the technique is reasonably reliable." The case involved Dennis Dean Kersting who was convicted of murder by the Circuit Court, Multnomah County, Oregon, and he appealed. At the trial, the State presented an expert who testified that certain hairs obtained from the defendant were indistinguishable from or similar to hairs found on the victim. The defendant argued that that this was irrelevant to the case.

At the Court of Appeals, the defendant argued that the scientific techniques used by the State's expert were not generally accepted in the scientific community as being reasonably reliable, therefore, the trial court erred by admitting the expert's testimony. In its ruling, the Court of Appeals of Oregon stated that "where judicial notice may not be taken properly because relatively new scientific techniques are involved, some foundation is required as a prerequisite to admission of such evidence; however, only

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[246] Id, at 1237.

[247] *State v. Kersting, 50 Or. App. 461, 623 P. 2d 1095 (1981).*

foundation required is that there be credible evidence on which the trial judge may make the initial determination that the technique is reasonably reliable and, if so, the evidence may be admitted and the weight to be given it is for the jury, who may consider evidence as to its reliability."[248] The Court of Appeals affirmed the trial court's decision and granted review.

The case reached the Supreme Court of Oregon, En Banc, which affirmed the Court of Appeals' decision. Delivering the judgment, Chief Justice Denecke, stated that "we granted review solely to consider one contention made by the defendant. That contention was that the Court of Appeals erred in adopting the "reliability" test for the admission of scientific testimony rather than the standard that scientific testimony must be based upon methods generally accepted in the scientific community. Upon review of the record we find that we cannot reach this issue."[249]

The above case is quite in contrast to *Christophersen v. Allied-Signal Corp.,*[250] where both the *Frye* test and Federal Rules of Evidence were combined. The case involved Rosemarie Christophersen (the surviving spouse of Albert Roy Christophersen, deceased), and Steven Roy Christophersen, who sued Allied-Signal Corporation, alleging that Albert Christophersen's death was as a result of exposure to fumes that contained particles of nickel and cadmium, which caused the small-cell cancer that led to his death in 1986. Albert Christophersen worked for fourteen consecutive years prior to his death,

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[248] Id.

[249] Id, at 1145.

[250] *Christophersen v. Allied-Signal Corp., 939 F. 2d 1106 (5th Cir. 1991).*

for the corporation at their plant based in Waco, Texas, where nickel and cadmium batteries were produced.

During the trial, the plaintiffs proffered expert testimony that exposure to cadmium and nickel fumes caused Albert's death. The defendants argued that the plaintiffs' expert testimony did not meet the *Frye* test, because the expert did not follow the generally accepted methods in reaching his conclusion, and that the basis for the expert's opinion was insufficiently reliable. The United States District Court for the Western District of Texas excluded the expert testimony. The Court stated that the plaintiffs' expert testimony did not meet the *Frye* criteria and granted summary judgment in favor of the defendants. There was an appeal. The issue centered on the appropriate criteria for admitting expert testimony.

The United States Court of Appeals, Fifth Circuit affirmed the trial court's summary judgment. The Court of Appeals in its ruling combined the *Frye* test and the Federal Rules of Evidence. The Court stated that:

"The Federal Rules of Evidence, combined with *Frye v. United States, 293 F. 1013 (D.C Cir. 1993),* provide a framework for trial judges struggling with proffered expert testimony. The signals are not neatly cabined categories, and we disentangle them only to accent the independent significance of each.

(1) whether the witness is qualified to express an expert opinion, Fed. R. Evid. 702.

(2) whether the facts upon which the expert relies are the same type as are relied upon by other experts in the field, Fed. R. Evid. 703.

(3) whether in reaching his conclusion the expert used a well-founded methodology, *Frye*; and

(4) assuming the expert's testimony has passed Rules 702 and 703, and the *Frye* test, whether under Fed. R. Evid. 403 the testimony's potential for unfair prejudice substantially outweighs its probative value.

These four signals or inquiries introduce no new concepts to our jurisprudence. They are only guideposts drawn from the Federal Rules of Evidence and our cases. We list these inquiries, but in doing so we do not intend that they be applied mechanically. At the same time, they often will naturally lend themselves to sequential application. The reality is that trials are too varied for fixed mold; we construct none today."[251]

The Federal Rules of Evidence was criticized. As we stated earlier on, the Rule did not mention the *Frye* general acceptance criteria. It did not state whether expert evidence must be generally accepted in the relevant scientific community.

The Federal Rules of Evidence is also too loose, too liberal and less stringent than *Frye*. Rule 702, for instance states that an expert can be qualified by knowledge, skill, experience, training or education. This in effect means that almost anybody can qualify as an expert witness.

Many scholars were also concerned about the appropriate interpretation of the Federal Rules of Evidence. Should the Rules be interpreted as a statute? Professor Weissenberger,

[251] Id, at 1110.

for instance, argued that The Federal Rules of Evidence is not a statute. He maintained that:

> In actuality, the Federal Rules of Evidence have very little in common with a typical statute. Most fundamentally, the Federal Rules of Evidence originated in, and were designed by, the judicial branch and not the legislative branch. In addition, the role of Congress in the process that generated the Federal Rules of Evidence was largely passive. Congress's primary function was to enact into law the will and intent of the Supreme Court and its Advisory Committee. Moreover, the judicial branch designed the Federal Rules of Evidence to operate as guidance for the exercise of discretion within the federal judiciary, and consequently, the Rules' intended function is very much unlike that of most statutes. Based on all of these considerations, the primary thesis of this ... is that application of the doctrine of "legislative intent" is functionally and substantially misplaced in the interpretation of the Federal Rules of Evidence.[252]

Professor Weissenberger further argued that "contrary to the typical statutory enactment, however, the Federal Rules of Evidence were developed by a multibranch process in which the subjective intent of the drafters is predominately traceable to the judicial branch. In the case of most of the Federal Rules of Evidence, Congress's role was primarily to review and ratify the intent of a coordinate branch of government in its design of rules intended to operate internally within that branch. Only in isolated instances, did Congress actually modify the version of the Rules submitted to it by the Supreme Court."[253] He contended that the "principle of legislative supremacy does not comport with the unique and extraordinary process which produced the Federal Rules of

[252] Weissenberger, supra note 232, at 1307.

[253] Id, at 1309.

Evidence",[254] arguing that the Rules "were never intended to operate as a statute which would have plain meaning. Rather than being designed as specific mandates, the Federal Rules of Evidence were consciously drawn with a recognition that the federal judiciary possess substantial inherent discretion in interpreting, expanding upon, and applying the Rules."[255]

Fundamentally, Professor Weissenberger maintained that the Federal Rules of Evidence "should not be interpreted as a typical statute, but should rather be subject to a unique set of hermeneutics that reflects the Rules' identity as a codification of the common law."[256] "Ultimately, however, treating the Federal Rules of Evidence as a stature will result in courts abdicating their time-honored role in crafting the law of evidence. If courts treat the Federal Rules of Evidence as a stature, they will defer to the legislative branch as the arbiter of evidentiary policy when confronted with the inevitable indeterminacy of the text of the Rules."[257]

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[254] Id.

[255] Id, at 1310.

[256] Glen Weissenberger, "The Elusive Identity of the Federal Rules of Evidence", 40 Wm. & Mary L. Rev. 1613 (May 1999).

[257] Glen Weissenberger, "Evidence Myopia: The Failure to see the Federal Rules of Evidence as a Codification of the Common Law", 40 Wm. & Mary L. Rev. 1539, 1554 (May 1999).

On the other hand, Professor Imwinkelried argued that the Federal Rules of Evidence is a statute and should be interpreted according to moderate textual principles of statutory construction.[258] Imwinkelried maintained that:

> In most of the cases construing the Federal Rules of Evidence, a majority of the justices have adopted a moderate textual approach. On the one hand, the justices have rejected a strict textual approach that would allow a judge to consider extrinsic legislative history material only if the judge cannot discern a "plain meaning" on the face of the statute. Instead, the justices routinely consider extrinsic material such as the Advisory Committee Notes and relevant congressional committee reports. On the other hand, a majority of the justices also have abandoned the traditional "legal process" approach to statutory construction. Under that approach, a judge should not only consider the extrinsic material; more importantly, he or she should attach great weight to the material. The legal process approach often yields the conclusion that an intent expressed only in the extrinsic material trumps any apparent plain meaning of the statutory text. In contrast, textualists assign great primacy to the specific language of the statute. They argue that the text is "all that Congress enacts into law" and that the extrinsic material is subject to manipulation by special interest groups. Moderate textualists thus recognize a strong, albeit rebuttable, presumption that the text prevails over any contrary meaning suggested by the extrinsic material. I have written in defense of this brand of moderate textualism.[259]

This argument amongst scholars as to the proper interpretation of the Federal Rules of Evidence and whether the Federal Rules of Evidence superseded the *Frye* test continued until the United States Supreme Court addressed the issue in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*[260] In *Daubert,*[261] the Supreme Court stated that the Federal Rules

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[258] Edward J. Imwinkelried, "Whether the Federal Rules of Evidence should be Conceived as a Perpetual Index Code: Blindness is Worse than Myopia.", 40 Wm. & Mary L. Rev. 1595, 1596 (1999).

[259] Id.

[260] *Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 S. Ct. 2786 (1993).*

[261] *infra* at 138.

of Evidence is a statute. Delivering the opinion of the Court, Justice Blackmun said: "we interpret the legislatively enacted Federal Rules of Evidence as we would any statute."[262] The Supreme Court also stated that the *Frye* test was superseded by the Federal Rules of Evidence.[263]

It should be noted that on April 17, 2000, United States Chief Justice, William H. Rehnquist, wrote to the speaker of the United States House of Representatives proposing an amendment of Rule 702. Thus, on December 1, 2000, Rule 702 was amended and three crucial requirements were added:-

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise, if
> *(1) the testimony is based upon sufficient facts or data,*
> *(2) the testimony is the product of reliable principles and methods, and*
> (3) *the witness has applied the principles and methods reliably to the facts of the case.*[264]

Daubert v. Merrell Dow Pharmaceuticals, Inc.

Following the criticisms of *Frye* and the confusion on whether the Federal Rules of Evidence replaced *Frye*, The United States Supreme Court in *Daubert v. Merrell Dow*

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[262] *Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 S. Ct. 2794 (1993).*

[263] Id, at 2793.

[264] The three additional requirements are noted in italics. Fed. R. Evid. 702.

Pharmaceuticals,[265] overturned the *Frye* test and stated that it had been superseded by the Federal Rules of Evidence. The facts of the case are that the petitioners, two minor children (Jason Daubert, Eric Schuller were born with severe birth defects) and their parents sued Merrell Dow Pharmaceutials Company, alleging that the birth defects were caused by the mothers' use of Bendictin, an anti-nausea drug marketed by the company. At the trial, the respondents offered expert testimony to prove that the use of Bendictin during pregnancy does not cause birth defects in humans. They called Dr. Steven H. Lamm, a physician and epidemiologist who testified that "he had reviewed all literature on Bendictin and human birth defects, more than thirty published studies involving over 130,000 patients, and that none of them found any link between Bendictin and malformations in fetuses."[266] Dr Lamm therefore, concluded that based on these, that the mothers's use of Bendictin during the first trimester of the pregnancy did not cause the birth defects.

The petitioners on the other hand, called eight experts who testified and concluded that Bendictin can cause birth defects. Their experts included Dr. Shanna Helen Swan and Dr. Stuart A. Newman. The experts drew their conclusions from (1) "in vitro" (test tube), and "in vivo" (live) animal studies that found a link between Bendictin and malformations, (2) pharmacological studies of the chemical structure of Bendictin which found similarities between the chemical structure of Bendictin and that of other substances that cause birth defects, (3) they carried out a "reanalysis" of previously

[265] *Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S. Ct. 2786 (1993).*

[266] Id, at 2791.

published epidemiological (human statistical) studies, which also found a link between Bendictin and birth defects.

The United States District Court for the Southern District of California, in their ruling, granted company's motion for summary judgment. The District Court stated that scientific evidence is admissible only if the principle upon which it is based is "sufficiently established to have general acceptance in the field to which it belongs."[267] The Court held that the testimony given by the petitioners' expert witnesses did not meet the applicable "general acceptance" standard for the admission of expert testimony. It was also held that expert opinion not based on epidemiological (human statistical) studies is not admissible to establish causation.[268] "Thus, the animal-cell studies, live animal studies, and chemical-structure analyses on which petitioners had relied could not raise by themselves a reasonably disputable jury issue regarding causation. Petitioners' epidemiological analyses, based as they were on recalculations of data in previously published studies that had found no causal link between the drug and birth defects, were ruled to be inadmissible because they had not been published or subjected to peer review."[269] The District Court therefore, granted company's motion for summary judgment and the petitioners appealed.

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[267] *Daubert v. Merrell Dow Pharmaceuticals, 727 F. Supp. 570, 572, (S.D. Cal. 1989).*

[268] Id, at 575.

[269] Id.

The United States Court of Appeals for the Ninth Circuit affirmed the District Court's decision and stated that "expert opinion based on a scientific technique is inadmissible unless the technique is "generally accepted" as reliable in the relevant scientific community."[270] The Court of Appeals also stated that expert opinion based on a methodology that diverges "significantly from the procedures accepted by recognized authorities in the field cannot be shown to be 'generally accepted as a reliable technique'."[271]

The Court of Appeals rejected the "reanalysis" of the epidemiological studies presented by the petitioners' experts and stated that "reanalysis is generally accepted by the scientific community only when it is subjected to verification and scrutiny by others in the field."[272] In affirming the District Court's decision, the Court of Appeals further stated that the reanalyses was "unpublished, not subjected to the normal peer review process and generated solely for use in litigation,"[273] and that the petitioners' experts provided insufficient foundation to prove that Bendictin caused the birth defects.

The case reached the United States Supreme Court. Michael H. Gottesman, counsel for the petitioners, argued that *Frye's* "general acceptance" criteria has been superseded by the Federal Rules of Evidence. The Supreme Court in its ruling, agreed with the petitioners and stated that the Federal Rules of Evidence, not *Frye* provide the standard

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[270] *Daubert v. Merrell Dow Pharmaceuticals, 951 F. 2d 1128, 1129 (9th Cir. 1991)*

[271] Id, at 1130.

[272] *Daubert v. Merrell Dow Pharmaceuticals, 951 F. 2d 1128, 1131 (9th Cir. 1991)*

[273] Id, at 1131.

for admitting expert scientific testimony in a federal trial.[274] The Supreme Court stated that *Frye's* "general acceptance" test was superseded by the adoption of the Federal Rules of Evidence.[275] It was held that "nothing in the Rules as a whole or in the text and drafting history of Rule 702, which specifically governs expert testimony, gives any indication that "general acceptance" is a necessary precondition to the admissibility of scientific evidence. Moreover, such a rigid standard would be at odds with the Rules' liberal thrust and their general approach of relaxing the traditional barriers to "opinion testimony."[276]

The Supreme Court further stated that:

> Faced with a proffer of expert scientific testimony under Rule 702, the trial judge, pursuant to Rule 104(a), must make a preliminary assessment of whether the testimony's underlying reasoning or methodology is scientifically valid and properly can be applied to the facts at issue. Many considerations will bear on the inquiry, including whether the theory or technique in question can be (and has been) tested, whether it has been subjected to peer review and publication, its known or potential error rate and the existence and maintenance of standards controlling its operation, and whether it has attracted widespread acceptance within a relevant scientific community. The inquiry is a flexible one, and its focus must be solely on principles and methodology, not on conclusions that they generate. Throughout, the judge should also be mindful of other applicable Rules.[277]

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[274] *Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S. Ct. 2792 (1993).*

[275] Id, at 2793.

[276] Id, at 2792-94.

[277] Id, at 2796-9.

Justice Blackmun stated that trial judges have the function to act as "gatekeepers" and determine whether the testimony being presented is reliable and scientifically valid. On the issue of whether the Federal Rules of Evidence is a statute, the Supreme Court stated that, "we interpret the legislatively enacted Federal Rules of Evidence as we would any statute. Rule 402 provides the baseline: "All relevant evidence is admissible, except as otherwise provided by the Constitution of the United States, by Act of Congress, by these rules, or by other rules prescribed by the Supreme Court pursuant to statutory authority. Evidence which is not relevant is not admissible."[278]

The Supreme Court went on to say that "given the Rules' permissive backdrop and their inclusion of a specific rule on expert testimony that does not mention "general acceptance", the assertion that the Rules somehow assimilated *Frye* is unconvincing. *Frye* made "general acceptance" the exclusive test for admitting expert scientific testimony. That austere standard, absent from, and incompatible with, the Federal Rules of Evidence, should not be applied in federal trials."[279]

The United States Supreme Court vacated the Court of Appeals decision and remanded the case for further proceedings.[280]

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[278] Id, at 2794.

[279] Id.

[280] Id, at 2799.

The Supreme Court's decision in *Daubert* has been criticized extensively. The opinion in *Daubert* created difficult burdens for trial judges, the opinion is still ambiguous, it did not address crucial questions, and did not provide specific guidelines to trial courts. Above all, it did not state whether the *Daubert* criteria also applied to nonscientific evidence. Under *Daubert*, trial judges became "gatekeepers" who have to decide what is a reliable or an unreliable scientific technique. As Justice Feldman has pointed out "judges are trained lawyers and only rarely trained scientists, which explains their failure to provide coherent guidelines on how to accomplish this task."[281] In fact, "the dilemma for the trial judge is how to separate the accurate, reliable testimony that aids the fact-finding process from the so-called "junk science" that contorts the fact-finding process. But whether *Daubert* does much to help is another challenge for the trial bench and bar."[282] Justice Feldman further argued that "the impact of the Court's newly elaborated standard is unclear. *Daubert* could be viewed as something of a disappointment. The Court declared that the *Frye* test was superseded by the Federal Rules of Evidence, and thereby outwardly relaxed the standard for admission of scientific evidence. However, the fact that the four *Daubert* criteria are substantially similar to the factors commonly employed by those courts that applied *Frye* suggests that the practical impact of *Daubert* could be minimal and confusing. Indeed, one critic has predicted that the *Daubert* standard will suffer the same problems that critics directed at *Frye*."[283] Justice Feldman therefore concluded that:

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[281] Justice Martin L. C. Feldman, "May I Have the Next Dance, Mrs. Frye?", 69 Tul. L. Rev. 793 (February 1995).

[282] Id.

[283] Id, at 802.

> At best, *Daubert* offers an awkward analytical model. The Court failed to provide trial judges with a well-defined standard for separating unreliable scientific evidence from reliable scientific evidence. Perhaps none exists. *Daubert* specifically ruled out the general acceptance standard as a precondition of admissibility, but offered only "general observations" in return. The Court failed to clarify whether *Daubert* expands or contrasts the role of the trial judge in considering the admissibility of scientific evidence. After all, we all already knew that we are the "gatekeepers". Moreover, the Court sent conflicting signals to trial courts by abandoning *Frye's* general acceptance test, only to resurrect it as one consideration under the new standard.[284]

On a similar vein, Professor Milich maintained that *Daubert* "requires nonscientist trial judges to evaluate science in a way that may exceed their scientific abilities" and also that "it is too vague on the degree of reliability that the trial judges are supposed to be looking for."[285]

Professor Jonakait was also highly critical of the *Daubert* decision which he also described as being unclear. He contended that *Daubert* is based on unarticulated assumptions.[286] "The opinion commands trial courts to determine whether something is "scientific", not whether it is physics, chemistry, biology, epidemiology, psychology, accidentology, clinical ecology, or forensic science. This can be done only if there are general standards and methods applicable to all fields of science that distinguish genuine

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[284] Id, at 806.

[285] Paul S. Milich, "Controversial Science in the Courtroom: Daubert and the Law's Hubris", 43 Emory L. J. 913, 917 (1994).

[286] Randolph N. Jonakait, "The Meaning of Daubert and What that Means for Forensic Science", 15 Cardozo L. Rev. 2103 (April 1994).

science from pseudoscience. Furthermore, the court's command can only be followed if trial courts can understand those standards and use them to identify real science. These premises, however, were not stated. It would have been better if they had been to help insure that trial courts would begin their analyses at the proper starting point."[287]

Professor Jonakait further argued that *Daubert* failed to address crucial questions; "for example, what if the error rate is unknown? Does it matter if it is ascertainable, but no one has bothered to ascertain it? What does it mean for the reliability of a scientific technique if its error rate is not knowable? If the error rate is known, does it matter? If the error rate is less than fifty percent does it satisfy a preponderance of the evidence notion of reliability? Or does the error rate have to be small enough to conform to "scientific" notions of confidence? Is there a connection between error rates and the statistical tests that normally require scientists to reach a ninety-five percent confidence level?"[288] These questions and many more were left unanswered by the Supreme Court in *Daubert*.

Professor Jonakait cautioned that courts should not reach a conclusion on a scientific method or technique simply because it has been peer reviewed or published, arguing that "peer review is hardly a perfect system – it is often less than demanding because scientists are busy or because of conflicts of interest."[289] "Furthermore, strict scrutiny

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[287] Id.

[288] Id, at 2106.

[289] Id, at 2111.

does not necessarily follow from the fact of publication. Too much scientific literature is published for scientists to scrutinize most of it."[290]

Polentz also maintained that *Daubert* is ambiguous and full of confusing contradictions. He argued that the "*Daubert* decision did not resolve how to correlate the Federal Rules of Evidence with the Federal Rules of Civil Procedure. Nor did *Daubert* ameliorate the conflict between the *Frye* test and the Federal Rules of Evidence. In addition, *Daubert's* ambiguity created new splits among the lower courts because of the potential for multiple interpretations of the decision. In short, the decision in *Daubert* is flawed, as it breeds confusion rather than clarity."[291]

It has also been argued that "the Supreme Court provided only abstract, general guidance about how the lower courts should handle admissibility of scientific evidence under the Federal Rules of Evidence. The Court did not apply the general guidelines it outlined to the facts of the case. Instead, it chose to remand the case to the Ninth Circuit for a determination of whether the testimony was grounded on a reliable foundation and was relevant."[292]

Moenssens was also very critical of the *Daubert* decision. He argued that *Daubert* "rather than protecting the fact finding process from contamination by unreliable expert

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[290] Id.

[291] Michael C. Polentz, "Post-Daubert Confusion with Expert Testimony", 36 Santa Clara L. Rev. 1187, 1202 (1996).

[292] Nancy S. Farrell, "Congressional Action to Amend Federal Rule of Evidence 702: A Mischievous Attempt to Codify Daubert v. Merrell Dow Pharmaceuticals, Inc.", 13 J. Contemp. Health L. & Pol'y 523, 534 (Spring 1997).

opinion, may have actually increased the likelihood of such contamination, especially in criminal cases."[293] Moenssens contended that "the Supreme Court in *Daubert* did not see fit to create distinctions between proof in criminal versus civil cases, as far as reliability is concerned, even though literature and case law frequently cautioned that in criminal cases, where a person's freedom is at stake, courts ought to be more reluctant to admit evidence based on new, as yet unproven, techniques when such evidence is being offered by the prosecution."[294] He suggested extra judicial caution, and the reasons for extra judicial caution include the following – most witnesses are not truly scientists but are technicians, pro-prosecution bias may impair scientific impartiality, experts tend to testify beyond their expertise, experts prevaricate on their credentials, there are doubts as to the proficiency of crime laboratories, human errors which can result in reaching wrong conclusions, among other reasons.[295]

Some states rejected *Daubert* and continued with *Frye*. In *People v. Leahy*,[296] for instance the Supreme Court of California rejected *Daubert* stating that *Kelly*[297]*/Frye* remained the standard for the admissibility of new scientific evidence. The case involved William Michael Leahy who was convicted by the Municipal Court, West Orange County Judicial District, of driving under the influence of alcohol and driving with blood alcohol level in excess of 0.08 percent. On the day he was arrested, the police officer gave the defendant

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[293] Andre A. Moenssens, "Novel Scientific Evidence in Criminal Cases: Some Words of Caution", 84 J. Crim. L. & Criminology 1, 4 (Spring 1993).

[294] Id.

[295] Id, at 5-20.

[296] *People v. Leahy, 8 Cal.4th 587, 882 P.2d 321 (1994).*

[297] supra at 108.

some field sobriety tests, including the HGN (horizontal gaze nystagmus) test. "An inability of the eyes to maintain visual fixation as they turned from side to side (in other words, jerking or bouncing) is known as horizontal gaze nystagmus, or HGN".[298] At the trial, the court admitted the HGN test without a *Kelly/Frye* hearing. The defendant was convicted and he appealed, arguing that the HGN test should not have been admitted without a Kelly/Frye hearing.

At the Court of Appeals, the issue centered on whether HGN tests are admissible without a *Kelly/Frye* hearing. In their ruling, the Court of Appeals reversed the trial court's judgment of conviction because the court failed to apply the *Kelly/Frye* standard. The Supreme Court of California granted review to decide whether the *Kelly/Frye* standard should be modified in view of the United States Supreme Court decision in *Daubert*.

Delivering the opinion of the Supreme Court, Chief Justice Lucas stated that "the *Kelly/Frye* formulation (or now more accurately, the *Kelly* formulation) should remain a prerequisite to the admission of expert testimony regarding new scientific methodology in this state. We further conclude, consistent with the Court of Appeal's conclusion herein, that the HGN test is a "new scientific technique" within the scope of *Kelly*, and that the trial court improperly admitted police testimony regarding that technique without first requiring compliance with Kelly".[299] Chief Justice Lucas also stated that "*Daubert*

[298] *People v. Leahy, 8 Cal.4th 587, 592, 882 P.2d 321 (1994).*

[299] Id, at 591.

affords no compelling reason for abandoning Kelly in favor of the more "flexible" approach outlined in *Daubert*".[300]

The Supreme Court of California held that:

> In sum, *Kelly* sets forth the various reasons why the more "conservative" *Frye* approach to determining the reliability of expert testimony regarding scientific techniques represents an appropriate one. *Daubert*, which avoided the issue of *Frye*'s "merits", presents no justification for reconsidering that aspect of our holding in *Kelly*. Thus, we conclude that the *Kelly* formulation survived *Daubert* in this state, and that none of the above described authorities critical of that formulation persuades us to reconsider or modify it at this time.[301]

Therefore, "our Kelly doctrine survived *Daubert* and continues to represent the standard by which new scientific techniques should be measured before evidence derived therefrom may be admitted in court."[302] Chief Justice Lucas also stated that "general acceptance" under *Kelly* means a consensus drawn from a typical cross-section of the relevant, qualified scientific community".[303]

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[300] Id, at 594.

[301] Id, at 604.

[302] Id, at 612.

[303] Id.

General Electric Co. v. Joiner

It should be noted that in *General Electric v. Joiner*,[304] the United States Supreme Court restated the function of the trial judge to determine when to admit or exclude scientific evidence. It was held that the abuse-of-discretion is the proper standard for appellate review regarding trial court decisions on the admissibility of evidence. Robert Joiner, an electrician and his wife, sued General Electric and Westinghouse Electric, where Joiner worked, alleging that his lung cancer was "promoted" by his exposure to polychlorinated biphenyls (PCBs) and their derivatives - "furans" and "dioxins". PCBs are hazardous substances that were banned by Congress in 1978, with limited exceptions.

Joiner called expert witnesses (Dr. Arnold Schecter and Dr. Daniel Teitelbaum), who testified that PCBs, furans and dioxins can "promote" lung cancer and therefore, concluded that Joiner's lung cancer was likely to have been caused by his exposure to PCBs at his workplace. The experts based their conclusions on the following.

(1) studies that showed that an infant mice developed cancer after being injected with massive doses of PCBs.

(2) an epidemiological study that involved workers who were exposed to PCBs at an Italian electrical plant. The study by Bertazzi, Riboldi, Pesatori, Radice and Zocchetti (1987), found that lung cancer deaths among the ex-workers at the Italian plant were higher than expected. It should be noted however, that these

[304] *General Electric Co. v. Joiner, 522 U.S. 136, 118 S. Ct. 512 (1997).*

authors were unwilling to state that PCBs had caused the lung cancer in the ex-workers.

(3) an epidemiological study that involved ex-employees at Monsanto's PCB production plant in Sauget, Illinios. The authors of the study (J. Zack and D. Musch, 1979), also found that lung cancer deaths among the ex-employees were higher than expected. The authors noted however, that their finding was not statistically significant and so could not suggest a link between the increase in lung cancer deaths and exposure to PCBs.

(4) an epidemiological study involving workers at a Norwegian Cable manufacturing company, who were exposed to mineral oil. The authors of the study – (Ronneberg, Andersen and Skyberg (1988)), found a statistically significant increase in lung cancer in the workers, but the study did not mention PCBs.

(5) an epidemiological study involving workers exposed to PCBs in Japan. The authors – (Kuratsune, Nakamura, Ikeda and Hirohata 1987), found a statistically significant increase in lung cancer among the workers, but the workers were exposed to numerous potential carcinogens. The workers were also exposed to toxic rice oil.

Based on the above studies, Joiner's expert witness, Dr Schecter testified that it is "more likely than not that Mr. Joiner's lung cancer was causally linked to cigarette smoking and PCB exposure."[305] Dr. Teitelbaum also testified that Joiner's lung cancer was caused by

[305] Id, at 518.

or contributed to a significant degree by his exposure to the substances at the plant where he worked.

The petitioners on the other hand argued that the experts' conclusions were mere speculation, not supported by appropriate epidemiological studies, and was based on studies with laboratory animals.

In its ruling, the United States District Court for the Northern District of Georgia excluded the experts' testimony and stated that the animal studies that the experts relied on, did not support his contention that the PCBs promoted his small cell cancer.[306] The District Court stated that the study involving infant mice that was injected with highly concentrated and massive doses of PCBs was different from the case of Robert Joiner, who is an adult human, and who was only exposed to PCBs on a small scale. The Court also rejected the four epidemiological studies presented by Joiner's experts. It was held that the studies did not provide a sufficient basis for an expert's opinion, since the authors of the studies were unwilling to suggest a link between increases in lung cancer and exposure to PCBs. The Court stated that the third epidemiological study that involved workers who were exposed to mineral oil was not relevant to the case. Similarly, the District Court also rejected the fourth study that involved workers exposed to many carcinogens, plus PCBs. The study was not specific to PCBs. The Court therefore, granted summary judgment to the petitioners and stated that "there was no genuine issue as to whether he had been exposed to furans and dioxins, and his experts' testimony had

[306] *General Electric Co. v. Joiner, 864 F. Supp. 1310 (N.D. Ga. 1994).*

failed to show that there was a link between exposure to PCBs and small-cell lung cancer and was therefore inadmissible because it did not rise above "subjective belief or unsupported speculation."[307]

There was an appeal. The Eleventh Circuit Court of Appeals[308] reversed the judgment and ruled that the District Court erred in excluding the testimony of the respondent's expert witnesses. The Court of Appeals held that "because the Federal Rules of Evidence governing expert testimony display a preference for admissibility, we apply a particularly stringent standard of review to the trial judge's exclusion of expert testimony."[309]

The case reached the United States Supreme Court. The Supreme Court granted certiorari to determine "what standard an appellate court should apply in reviewing a trial court's decision to admit or exclude expert testimony under *Daubert*."[310] The Supreme Court reversed the judgment of the Court of Appeals. Delivering the judgment, Chief Justice Rehnquist, said: "we hold that abuse of discretion is the appropriate standard. We apply this standard and conclude that the District Court in this case did not abuse its discretion when it excluded certain proffered expert testimony."[311] Chief Justice Rehnquist further said that "we hold that the Court of Appeals erred in its review of the exclusion of Joiner's experts' testimony. In applying an overly "stringent" review to that ruling, it

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[307] Id, at 1326.

[308] *General Electric Co. v. Joiner, 78 F. 3d 524 (1996).*

[309] Id, at 529.

[310] *General Electric Co. v. Joiner, 522 U.S. 136, 118 S. Ct. 512 (1997).*

[311] Id, at 139.

failed to give the trial court the deference that is the hallmark of abuse-of-discretion review."[312]

Chief Justice Rehnquist also stated that:

> Respondent points to *Daubert's* language that the "focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." ... He claims that because the District Court's disagreement was with the conclusion that the experts drew from the studies, the District Court committed legal error and was properly reversed by the Court of Appeals. But conclusions and methodology are not entirely distinct from one another. Trained experts commonly extrapolate from existing data. But nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the ipse dixit of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered. ... That is what the District Court did here, and we hold that it did not abuse its discretion in so doing.[313]

In reversing the judgment, the Supreme Court said:

> We hold, therefore, that abuse of discretion is the proper standard by which to review a district court's decision to admit or exclude scientific evidence. We further hold that, because it was within the District Court discretion to conclude that the studies upon which the experts relied were not sufficient, whether individually or in combination, to support their conclusions that Joiner's exposure to PCBs contributed to his cancer, the District Court did not abuse its discretion in excluding their testimony. These conclusions, however, do not dispose of this entire case.[314]

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[312] Id, at 143.

[313] Id, at 146.

[314] Id.

The Supreme Court therefore, reversed the judgment of the Court of Appeals and remanded the case for "proceedings consistent with this opinion."[315] The Supreme Court's decision in this case has been criticized. Professor Giannelli, for instance, argued that the decision "seems to support the theme of liberal admissibility."[316] "The Court ruled that the proper standard for reviewing a trial court's admissibility decision under *Daubert* was an abuse-of-discretion, a standard adopted without even considering the principal alternative standard: de novo review. This standard suggests that admissibility decisions would not be second guessed on appeal – i.e., giving the trial court more leeway in admitting evidence. In contrast, a de novo review standard would have given appellate courts more authority to control junk science."[317]

Kumho Tire Co. Ltd. v. Carmichael

As we mentioned earlier on in this chapter, the *Daubert* decision was criticized on several issues. There was the unresolved issue of whether the *Daubert* criteria also applied to non scientific testimony. Thus, on March 23, 1999, the United States Supreme Court in the case of *Kumho Tire Co. v. Carmichael,*[318] stated that the function of trial judges to act as

[315] *General Electric Co. v. Joiner, 522 U.S. 136, 147 (1997*

[316] Paul C. Giannelli, "Daubert Revisited", 41 No. 3 Crim. Law Bulletin 5, (June 2005).

[317] Id.

[318] *Kumho Tire Co. v. Carmichael, 526 U.S. 137, 119 S. Ct. 1167 (1999).*

"gatekeepers", requiring an inquiry into both the relevance and reliability of expert testimony, "applies not only to "scientific" testimony, but to all expert testimony."[319]

On July 6, 1993, Patrick Carmichael was driving his minivan when the right rear tire on the van blew out and the van overturned. One passenger died while others sustained serious injuries. Carmichael and the others sued the tire manufacturer and distributor (collectively called *Kumho Tire Co.*), for the death and the injuries. They claimed that the tire failed because it was defective. They called a tire failure analyst, Dennis Carlson, Jr., who testified that he had examined the failed tire, and was of the opinion that a defect in the tire's manufacture or the design caused the tire to blow out. He said that his analysis of the failed tire showed that the tread of the tire separated from the steel-belted carcass, which means that the separation was caused by either a defect or from overdeflection, which is a type of tire abuse. Carlson based his conclusions on (1) a visual and tactile inspection of the failed tire, and (2) on his own theory that "in the absence of at least two of four specific, physical symptoms indicating tire abuse, the tire failure of the sort that occurred here was caused by a defect."[320] According to Carlson, "these symptoms include (a) tread wear on the tire's shoulder that is greater than the tread wear along the tire's center, (b) signs of a "bead groove", where the beads have been pushed too hard against the bead seat on the inside of the tire's rim, (c) sidewalls of the tire with physical signs of deterioration, such as discoloration, and/or (d) marks on the tire's rim flange."[321]

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[319] Id, at 138.

[320] Id, at 137.

[321] Id, at 144.

During his testimony, Carlson noted that (1) the failed tire was made in 1988 and was installed before Carmichael bought the van in March 1993, (2) the Carmichaels had driven the van approximately 7,000 additional miles in the two months that he owned the van, and (3) that the tire tread had at least two punctures that had been repaired inadequately.[322]

Counsel for *Kumho Tire Co.*, argued that the expert's testimony should be excluded because the methodology used by the expert in reaching his conclusion was unreliable. *Kumho Tire Co.* also argued that the methodology did not satisfy the Federal Rule of Evidence 702 which requires expert testimony to be both relevant and reliable. They also argued that the methodology did not satisfy the *Daubert* criteria.

The United States District Court for the Southern District of Alabama,[323] excluded the expert's testimony and granted summary judgment for defendants. In excluding the testimony, the District Court stated that the Federal Rule of Evidence 702 "imposes a special obligation upon a trial judge to ensure that scientific testimony is not only relevant but reliable. The District Court also recognized the fact that *Daubert* required trial judges to act as "gatekeepers" and should consider four factors when deciding whether to admit or exclude expert testimony. In the Court's view, Carlson's testimony did not satisfy *Daubert*'s four factors – testability, peer review and publication, error rate and general acceptance.

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[322] Id, at 143.

[323] *Carmichael v. Samyang Tire, Inc., 923 F. Supp. 144 (SDAla. 1997).*

The plaintiffs then filed a motion for reconsideration, stating that the *Daubert* factors should be applied flexibly. The District Court granted their motion for reconsideration and agreed that "*Daubert* should be applied flexibly, that its four factors were simply illustrative, and that other factors could argue in favor of admissibility."[324] The District Court however, affirmed its earlier decision, stating that it "found insufficient indications of the reliability of Carlson's methodology."[325] The plaintiffs appealed.

The Court of Appeals for the Eleventh Circuit reversed the judgment and remanded. The Court of Appeals held that the District Court erred as a matter of law in applying the *Daubert* standard. Following a de novo review of the District Court's decision to apply the *Daubert* criteria, the Court of Appeals stated that *Daubert* only applied to "scientific" testimony, and that Carlson's testimony was not scientific and therefore falls outside the scope of *Daubert.*[326]

The case reached the United States Supreme Court, which granted certiorari and reversed the Court of Appeals decision. The issue centered on whether the *Daubert* factors also applied to nonscientific expert testimony. The Supreme Court held that the District Court's decision to exclude Carlson's testimony was within its discretion and was lawful. The Supreme Court also noted that there was no reference to any articles or papers that validates Carlson's methodology. The Supreme Court stated that:

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[324] *Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999).*

[325] *Carmichael v. Samyang Tire, Inc., 923 F. Supp. 144 (SDAla. 1997).*

[326] *131 F. 3d 1433, 1435 (11th Cir. 1997).*

> The *Daubert* "gatekeeping" obligation applies not only to "scientific" testimony, but to all expert testimony. Rule 702 does not distinguish between "scientific" knowledge and "technical" or "other specialized" knowledge, but makes clear that any such knowledge might become the subject of expert testimony. It is the Rule's word "knowledge", not the words (like "scientific") that modify that word, that establishes a standard of evidentiary reliability. *Daubert* referred only to "scientific" knowledge because that was the nature of the expertise there at issue. Neither is the evidentiary rationale underlying *Daubert's* "gatekeeping" determination limited to "scientific" knowledge. Rules 702 and 703 grant all expert witnesses, not just "scientific" ones, testimonial latitude unavailable to other witnesses on the assumption that the expert's opinion will have a reliable basis in the knowledge and experience of his discipline. Finally, it would prove difficult, if not impossible, for judges to administer evidentiary rules under which a "gatekeeping" obligation depended upon a distinction between "scientific" knowledge and "technical" or "other specialized" knowledge, since there is no clear line dividing the one from the others and no convincing need to make such distinctions.[327]

The Supreme Court further stated that a trial judge may consider one or more of the *Daubert* factors when deciding whether to admit or exclude expert testimony. The Supreme Court therefore, held that "the Court of Appeals erred insofar as it ruled those factors out in such cases. In determining whether particular expert testimony is reliable, the trial court should consider the specific *Daubert* factors where they are reasonable measures of reliability."[328]

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[327] *Kumho Tire Co. v. Carmichael, 526 U.S. 137, 138 (1999).*

[328] Id.

Justice Breyer, delivering the opinion of the Supreme Court, also stated that "a court of appeals must apply an abuse-of-discretion standard when it reviews a trial court's decision to admit or exclude expert testimony."[329] Justice Breyer further stated that:

> We must therefore disagree with the Eleventh Circuit's holding that a trial judge may ask questions of the sort *Daubert* mentioned only where an expert "relies on the application of scientific principles", but not where an expert relies "on skill – or experience-based observation". We do not believe that Rule 702 creates a schematism that segregates expertise by type while mapping certain kinds of questions to certain kinds of experts. Life and the legal cases that it generates are too complex to warrant so definitive a match.[330]

In a nutshell, the Supreme Court recognized the fact that not all the *Daubert* factors applied to all forms of expert testimony; and that the *Daubert* factors did not constitute mandates but are flexible guidelines, and that trial judges must look at other factors bearing in mind the circumstances of each case.

The Supreme Court's decision in this case has faced some criticisms. Professor Weissenberger, for instance, argued that "a closer examination of the reasoning in *Kumho*, however, reveals limits to the applicability of the more specific holdings in *Daubert* to non-scientific expert testimony. The court declined to limit the trial court's determination of the reliability of expert testimony to the celebrated (or notorious, depending upon one's adversarial posture), list of factors set forth in *Daubert*, and the

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[329] Id.

[330] Id, at 151.

court also stated that an application of those factors was not necessary in every case. After *Kumho*, it is clear that factors other than those listed in *Daubert* may be considered by trial courts in determining the reliability of proffered testimony, and certain *Daubert* factors may simply be inapplicable to certain kinds of expert testimony."[331]

In summary, this chapter has revealed the confusion, controversy and inconsistencies surrounding the admissibility of expert testimony. We have discussed the three main rules guiding the admissibility of expert testimony, bringing out their various strengths and weaknesses. The *Frye* test emphasizes general acceptance of a technique in the relevant discipline. The Federal Rule of Evidence 702 emphasizes relevance and reliability of a technique. The Rule also stresses that a method or technique can be scientific, technical or other specialized field of knowledge. Rule 702 further stresses that if a method or technique can assist judges and jurors, then an expert qualified by knowledge, skill, experience or training should be allowed to give expert testimony. *Daubert* emphasizes relevance, reliability, and validity. *Daubert* stresses that trial judges have the function to act as "gatekeepers." Above all, *Daubert* also emphasizes that there are four factors that trial judges should be looking at when deciding to admit or exclude expert testimony (testability, peer review, error rate and general acceptance). In essence, this chapter has revealed the problems resulting from the adoption of the three rules. In the next chapter, we discuss the admissibility of offender profiling and the impact these three rules have on the trial outcome of cases involving offender profiling.

[331] Glen Weissenberger, Weissenberger's Federal Evidence: 2006 Courtroom Manual, 227 (2005).

Chapter Four

Offender Profiling in the Courtroom

> Though courts have generally rejected testimony concerning profiling frankly so offered, they have often bent over backwards to admit profiling-based testimony, or testimony by profilers, when it could be labeled differently.[332]

Offender profiling is a crime investigation technique based on probabilities, stereotypes, suspicion and assumptions. It does not point to a specific offender as being responsible for a specific offense. Offender profiling only generalizes. As such it is not a method sufficiently reliable to prove the guilt or innocence of an accused. There are no questions as to the usefulness of offender profiling in crime investigations. Where there are question marks and problems are when it is being introduced into the courtroom as evidence. The reliability and validity of offender profiling cannot be ascertained at the moment by any objective method.

The nature of offender profiling does not lend this technique to any form of reliable testing. There is the problem of replicating a crime scene. No one can state with certainty that one offender will commit all crimes in the same manner or exhibit the same characteristics at subsequent crimes. Offenders, especially serial offenders, will learn from experiences, media, from victim responses, and then may change their method of operation. They may also develop new fantasies; hence the signature aspects of their crime may change.

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[332] Risinger and Loop, supra note 34, at 253.

The current position in United States courts is that offender profiling and its derivatives have been admitted in many cases and also have been excluded in many others. There has been a lot of inconsistencies. Hence, in this chapter, the central problems of offender profiling evidence are discussed. In some of the cases where offender profiling or its derivatives were admitted, it is surprising that the reliability of this technique was never questioned. Some of the courts appeared to have been taken in by the credentials of the profilers at the expense of assessing the reliability and validity of this technique. The fact that a technique is useful in crime investigation does not render it a reliable tool for courtroom use. Utility does not equal/amount to reliability.

Is Offender Profiling Impermissible Character Evidence?

There are many problems with the introduction of offender profiling in the courtroom. The first relates to whether offender profiling constitutes impermissible character evidence. There is general disagreement amongst scholars and courts as to whether offender profiling is impermissible character evidence. The Federal Rules of Evidence, Rule 404 deals with character evidence and provides the guideline. Rule 405 and 406 also affects character evidence. It is therefore, important to cite the Rules at length.

Rule 404. Character Evidence Not Admissible to Prove Conduct; Exceptions; Other Crimes.

(a) Character evidence generally. – Evidence of a person's character or trait of character is not admissible for the purpose of proving action in conformity therewith on a particular occasion, except:

(1) Character of accused. – In a criminal case, evidence of a pertinent trait of character offered by an accused, or by the prosecution to rebut the same, or if evidence of a trait of character of the alleged victim of the crime is offered by an accused and admitted under Rule 404(a)(2), evidence of the same trait of character of the accused offered by the prosecution;

(2) Character of alleged victim. – In a criminal case, and subject to the limitations imposed by Rule 412, evidence of a pertinent trait of character of the alleged victim of the crime offered by an accused, or by the prosecution to rebut the same, or evidence of a character trait of peacefulness of the alleged victim offered by the prosecution in a homicide case to rebut evidence that the alleged victim was the first aggressor;

(3) Character of witness. – Evidence of the character of a witness, as provided in Rules 607, 608, and 609.[333]

Rule 405. Methods of Proving Character

(a) Reputation or opinion. In all cases in which evidence of character or a trait of character of a person is admissible, proof may be made by testimony as to

[333] Fed. Evid. R. 404.

reputation or by testimony in the form of an opinion. On cross-examination, inquiry is allowable into relevant specific instances of conduct.

(b) Specific instances of conduct. In cases in which character or trait of character of a person is an essential element of a charge, claim, or defense, proof may also be made of specific instances of that person's conduct.[334]

Rule 406. Habit; Routine Practice

Evidence of the habit of a person or of the routine practice of an organization, whether corroborated or not and regardless of the presence of eyewitnesses, is relevant to prove that the conduct of the person or organization on a particular occasion was in conformity with the habit or routine practice.[335]

In general terms, offender profiling deals with the character traits of individuals. As such it is character evidence. However, whether it will be seen as permissible or impermissible character evidence largely depends on two things. First, for it to be admissible the defendant must first put his character at issue. If the prosecution offers character evidence before the defendant, it will be ruled inadmissible. Second, whether it will be ruled admissible or inadmissible also depends on the purpose of its introduction. By purpose, we mean – is it being introduced to show criminal intent, criminal propensity or is it simply to assist the fact-finders? It is generally permissible where it is being used to show criminal intent as opposed to where it is being offered to show criminal propensity.

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[334] Fed. Evid. R. 405

[335] Fed. Evid. R. 406

Cleary et al maintained that "when the plaintiff or the government offers evidence that the defendant fits an incriminating profile, it may be excluded under the rule that prohibits evidence of character to show conduct on a particular occasion. Yet, arguably the rule should not bar admission in all such cases. After all, the rule rests on the premise that the marginal probative value of character evidence generally is low while the potential for distribution, time-consumption and prejudice is high. If it were shown that the profile was both valid and revealing – that it distinguishes between offenders and non-offenders with great accuracy – then the balance might favor admissibility. It is far from clear, however, that any existing profile is this powerful."[336]

Thus, "when the profile evidence is used defensively (to show good character, to restore credibility, or to prove apprehension in connection with a claim of self-defense), it falls under an exception to the rule against character evidence. Admissibility then should turn on the extent to which the expert testimony would assist the jury viewed in the light of the usual counterweights. The qualifications of the expert, the reliability and validity of using the profile, and the need for the evidence thus affect the admissibility and of course the weight of the profile evidence."[337]

In *State v. Haynes,*[338] the expert testimony of a criminal profiler was seen as impermissible character evidence, and therefore inadmissible. Richard Haynes was

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[336] Edward W. Cleary., Kenneth S. Brown., George E. Dix., Ernest Gellhorn., D.H. Kaye., Robert Meisenholder, E.F. Roberts., and John W. Strong, McCormick on Evidence, 3rd Edition, 635 (1984).

[337] Id, at 636.

[338] *State v. Haynes, 1988 WL 99189 (Ohio App. 9 Dist).*

charged with murder and grand theft of a motor vehicle, and was convicted by the Common Pleas Court, County of Lorain, Ohio. Richard Haynes claimed that on October 20, 1986, he went to Douglas Fauver's home to fill out a job application form and was offered some drinks and some pills (speed). He claimed that at 11.30 pm he woke up from sleep and found out that he was still at Fauver's home and that Fauver was sitting across from him, stark naked.[339] Fauver then told him that he had sexual intercourse with him and wanted to know if he enjoyed it.[340] Haynes said that he then went to the bathroom to clean up. Then Fauver came at him with a small knife and they engaged in a fight. Haynes also stated that he stabbed Fauver twice in the chest and once in the back, after Fauver had cut his (Haynes) wrist. Haynes claimed that he then waited for two hours for the police to arrive, but they did not. He said that he thought the neighbors had called the police when they heard the noise during the fight. Haynes later used a stolen car to get away and was arrested in Arizona for another crime. It should be noted that Fauver died in his home and his body was discovered the next day.

At the trial, the State called Robert Walter, a psychologist and criminal profiler, to testify in support of the State's argument that the murder was anger-retaliatory and "not a homophobic murder done out of panic after an unsolicited homosexual encounter."[341] The State believed and argued that the timing of the events, along with other factors, implied that Fauver's murder was anger-retaliatory.[342] Walter testified that there is what

[339] Id.

[340] Id, at 1.

[341] Id, at 2.

[342] Id.

he called homophobic murder and anger-retaliatory murder and that each type has distinctive patterns. He stated that his analysis of the crime scene characteristics and reports revealed patterns consistent with anger-retaliatory murders. Therefore, he was of the opinion that the murder was not committed as a result of panic. Haynes claimed that he acted in self-defense and that the State "set up the theory of homophobic murder as a strawman argument and then set out to attack it."[343] The expert's testimony was however, admitted.

Haynes was convicted and sentenced to a term of fifteen years to life for the murder and a consecutive term of two years for the theft. He appealed his conviction. The defendant argued that Walter's theory was not generally accepted and was not scientifically reliable and should not have been admitted. The defense also argued that the prejudicial effect of the expert testimony far outweighed its probative value. Furthermore, the defendant argued that "the State has overlooked the principle that unless scientific evidence and/or theory can be considered reliable, it cannot be of assistance to the trier of fact."[344]

The Court of Appeals of Ohio, Ninth District., Lorain County, ruled that the "admission of Walter's testimony conflicts with several evidentiary rules"[345] and therefore its admission was error. The Court did not see offender profiling as being reliable and stated that "although this testimony may indicate that profiles may be a reliable investigative

[343] Id.

[344] Id, at 3.

[345] Id, at 2.

tool, there is little indication in the record that they can be said to be reliable for the purposes for which they were used by the state in the instant case."[346]

On the issue of whether the criminal profiling testimony assisted the trier of fact, the Court of Appeals stated that "the relevancy/admissibility analysis of novel scientific evidence also requires that the expert's testimony assist the trier of fact to understand the evidence or determine a fact in issue. If the subject of the testimony is within the understanding of the jury, it is inadmissible. It appears that the main point made by expert testimony in the instant case was well within the understanding of the average juror, as demonstrated by the following colloquy on direct examination."[347]

Delivering the judgment, Justice Cacioppo, stated that the expert testimony was more prejudicial than probative, and stated that:

> The issues of timing and sudden panic are directly related to the distinction between voluntary manslaughter and murder. From the defendant's confession, a jury could decide for themselves that he did not kill Fauver immediately after discovering that he had been assaulted, but that a period of time had elapsed in which he could have "cooled off". The use of expert testimony for this purpose was improper; the prejudicial impact outweighed probative value, as it tended to "sensationalize" the facts and issues.[348]

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[346] Id, at 3.

[347] Id, at 4.

[348] Id.

Furthermore, the Court of Appeals held that the testimony relating to "timing and panic embraced the ultimate issue of intent to be decided by the jury."[349] It was also held that the expert's testimony confused the issues and/or misled the jury, by setting up the strawman argument.[350]

Interestingly, the Court of Appeals also held that the admission of the expert testimony violated Evid. R. 404(A)(1), regarding character evidence. Justice Cacioppo stated that "in the instant case, Walter testified that the appellant's version of the killing and his subsequent actions were classically typical of an anger-retaliatory murder. In fact, Walter testified at great length and in great detail as to the traits and characteristics of such a type of murderer, and found that the appellant's actions and motivations matched that profile."[351] Hence, "the possibility of stereotyping also brings up the possibility that admission of the expert testimony violated Evid.R. 404(A)(1)."[352]

The Court of Appeals further stated that since the defendant did not testify, he did not put his character in issue.[353] The Court also stated that "Walter's testimony on anger-retaliatory profile was laden with references to personality and character traits of the

[349] Id.

[350] Id.

[351] Id, at 5.

[352] Id.

[353] Id.

accused that matched the profile of a deliberate killer. The testimony therefore, can be considered inadmissible solely on the basis of Evid.R. 404(A)(1)."[354]

The Court also held that the expert testimony was inadmissible based on the hearsay rule.

> Walter testified on cross-examination that he based his opinion on police reports, the autopsy report, and conversations with the prosecutor and the police. Only the autopsy report was admitted into evidence. "Pursuant to Evid.R. 703, an expert may not base his opinion on hearsay but must rely upon his own personal knowledge of facts and data submitted as evidence in the case." ... The conversations Walter had with the police and the prosecutor are clearly hearsay.[355]

The Court of Appeals therefore concluded that "there exists a reasonable possibility that the admission of Walter's expert testimony contributed to the appellant's conviction, and therefore the error was not harmless beyond a reasonable."[356] Haynes's conviction was therefore reversed and remanded for a new trial.

In *State v. Roquemore*,[357] the opinion testimony of an offender profiler was ruled inadmissible. It was seen to be impermissible character evidence. The court stated that such testimony which stereotypes the defendant violates the Federal Rule of Evidence 404(A)(1).[358] The defendant, Dennis Roquemore was convicted of two counts of rape

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[354] Id.

[355] Id, at 6.

[356] Id, at 7.

[357] *State v. Roquemore, 85 Ohio App.3d 448, 620 N.E.2d 110 (1993)*

[358] Id, at 115.

and one count of involuntary manslaughter by the Franklin County Court of Common Pleas, Ohio. The defendant knew the victim (Yvonne Mathis) for ten years and they lived together for one year in 1990. Roquemore claimed that on September 1, 1990, they both went to a friend's house where they drank and socialized with other people and that on their way back to their home, Mathis was angry because of certain jokes at the friend's house. Roquemore claimed that later on he 'wrestled' with Mathis and they had 'rough' sexual intercourse, and that afterwards he noticed that Mathis was unconscious. He also claimed that "he attempted to revive her and then carried her into the bathroom and placed her in the bathtub to run water over her. He began to panic and left the house."[359] Roquemore further claimed that he then went to an ex-girlfriend's house but there was no answer. He therefore, telephoned her and told her what happened and she called the police. Roquemore said that the police went to the wrong house and he went to Alum Creek Reservoir to kill himself but he could not, and then he went back to the house and called the police.

At the trial, the State argued that Roquemore raped Mathis and that Mathis died as a result of rape trauma. The State therefore, called a criminal profiler, Richard Walter, who testified that his review of the crime scene, the crime scene photographs, police reports and pathological reports showed that rape occurred. The main reason that the State called the profiler was to give testimony on the crime scene assessment which will bolster their argument that the defendant raped the victim and that the victim died as a result of heart stoppage from the rape trauma. Walter testified that the crime scene showed patterns of

[359] Id, at 112.

violent rape behavior. In his testimony, Walter stated that the crime scene fell into patterns of known violent behavior that he had studied in the past.[360] It should be noted that during cross-examination, Walter was asked if he was going to give an opinion on whether rape occurred and he answered in the affirmative.[361]

The defense argued that the expert's testimony should be excluded. The defendant acknowledged that they had rough sex that night and that they have had rough sex in the past, and that he did not rape Mathis. The State argued that Walter's testimony should be admitted because he was testifying about the patterns of violent behavior that occurred, and not to the conduct of the defendant. The State further presented the medical examiner, who testified that Mathis's death was "related to the rectal and vaginal trauma that she had suffered and subsequent, due to pain, emotional disability from this abnormality, that she had sudden cardiac stoppage on the basis of a neurogenic response to the trauma that she suffered and this caused her heart to stop beating and she subsequently expired because it did not start beating again."[362] The medical examiner further stated that "if the nerve response had not occurred, the injuries received by the victim would not have caused death."[363]

The expert's testimony was admitted. The defendant was convicted and he appealed. Among other issues, the defendant argued that the trial court erred by admitting the

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[360] Id.

[361] Id, at 113.

[362] Id, at 112.

[363] Id.

profile testimony. He argued that the testimony was inadmissible because it violated Evid. R. 402, 403, and 703. Hence, he was denied due process of law. The defendant also argued that the profile testimony was irrelevant and unfairly prejudicial.

In its ruling, the Court of Appeals of Ohio, Tenth District, held that even though the expert's testimony was relevant, it ought to have been excluded because it violated other evidence rules. Delivering the opinion of the Court, Justice Whiteside said: "the witness's testimony appears to be relevant, since it indicates a pattern of violence and makes the determination that a rape occurred more probable than without the evidence. However, even though the evidence may be relevant, it must be excluded, since it conflicts with other evidence rules which provide that it must be excluded. For example, excludable hearsay is inadmissible because it is relevant but unreliable."[364]

Justice Whiteside went on to say that Federal Rule of Evidence 702 "establishes the requirement that expert testimony is admissible only if it will assist the trier of fact. This means that the expert testimony must have both a sufficient basis and a sufficient factual foundation in the record that can reasonably be relied upon."[365] Justice Whiteside therefore, ruled that "although the witness stated that the assessment is probability based, he does not keep files on all the cases he reviews (only approximately twenty-five percent of them), nor does he keep statistics about them. He stated that he used statistics from

[364] Id, at 113.

[365] Id.

other sources, including the FBI, but there is no indication as to how he reaches his conclusions."[366]

Hence, the Court of Appeals held that "in this case, there is a distinct possibility of stereotyping the defendant. The witness testified only concerning the "typical" crime scene pattern and the "typical" violence associated with such a crime scene. The witness did not interview or evaluate the defendant or "profile" a specific person. He profiles for a type of person who would do a particular crime that has been assessed as a member of that group. This stereotyping of the defendant has several problems. First, the stereotyping can prejudice the jury."[367] The Court therefore, ruled that assuming aguendo that the testimony satisfied the relevancy requirement it must still be excluded if its prejudicial effect substantially outweighed its probative value.[368] The Court concluded that "these generalities and typical facts rather than specific facts tend to place the defendant into a stereotype."[369]

The Court of Appeals held that the profile testimony, which stereotypes the defendant violated Evid. R. 404 (a)(1) on character evidence. The Court of Appeals restated the fact that, "this rule does not allow the prosecution to procure testimony about character traits of the defendant unless the defendant first put his character in issue in the case. In this case, the witness discussed anger, revenge, hostility and difficulty in relationships with

[366] Id, at 114.

[367] Id, at 115.

[368] Id.

[369] Id.

women, all in relation to the motivational structure on which he classified this case. This type of character evidence is inadmissible at least unless the defendant has first put his character at issue and probably not even then."[370]

Justice Whiteside further stated that the profile testimony has to be excluded as it is in conflict with Evid. R. 703, which provides that "the facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by him or admitted in evidence at the hearing."[371] Justice Whiteside said:

> In this case, the witness based his opinions on the crime scene photos, the police reports and the pathological report. When a direct opinion based solely on the police report was about to be given, the court instructed the jury not to accept or consider the opinion of this witness based on the police report in this case. This instruction is a curative one and we assume the jury followed the instruction. However, to the extent any other opinions of this witness, such as how he determined in which classification these events belonged, were based on the police report, these opinions are inadmissible based upon Evid. R. 703, since the police reports were not admissible into evidence.[372]

It was also held that "since the witness purported to base his opinion on his own "studies" rather than upon an accepted scientific basis, the opinion testimony is not admissible."[373] In the Court's view: "without the witness's testimony, the evidence admitted is far short of being overwhelming of defendant's guilt. It may be reasonable to find either that a

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[370] Id, at 116.

[371] Id.

[372] Id.

[373] Id.

rape did or did not occur that evening, but it is for the jury to decide which version of the events to believe. The weight given to and the credibility of the witness are questions for the trier of fact to determine. ... There exists a reasonable possibility, actual probability, that the witness's testimony contributed to the defendant's conviction, thereby prejudicing him. This prejudice affected a substantial right and the error is not harmless. Since admission of the opinion evidence was prejudicial error, defendant's first assignment of error is well taken."[374]

The Court of Appeals therefore, reversed the trial court's judgment and remanded the case for further proceedings.

Offender profile evidence was also ruled to be impermissible character evidence in *State v. Parkinson,*[375] where sex offender profile testimony by a psychologist, and by a former FBI agent, was ruled inadmissible. The experts offered expert opinion that the defendant did not fit the profile of a sex offender. Kelly Parkinson was charged and convicted of sexual abuse of a child under the age of sixteen. On March 28, 1992, Parkinson's niece, E.F. (13 years) and her brother, B.F. (12 years), visited Parkinson and spent the night at his house. The two children and their cousin slept in one of the bedrooms; E.F. slept in the bed, while her brother and her cousin slept on the floor. It was reported that Parkinson went into the bedroom where the three children were sleeping three times that night and each time he sexually abused E.F. E.F. said that first, she woke up and found Parkinson

[374] Id, at 117.

[375] *State v. Parkinson, 128 Idaho 29, 909 P.2d 647 (1996).*

rubbing her buttocks.[376] About two hours later, Parkinson came back and was "rubbing her breast and pulling at her nightgown."[377] That Parkinson came back around 6.30 am and again came to the bed and began rubbing her buttocks. E.F said that her brother B.F. was awaken and was stirring at what was happening and Parkinson then left the bedroom. E.F. then started crying and told her brother what happened that night. On March 31, 1992, they told their mother what happened and she called the police.

At the trial, Parkinson called two expert witnesses, Dr. Marcel Chappuis (a psychologist) and Mr. Peter M. Welch (a former FBI agent). The defendant sought to introduce the experts to testify that he did not fit the psychological profile of a sex offender, and therefore, would not have committed the crime.

The trial judge denied the motion to introduce the testimony by the two experts. The trial court stated that; (1) the profile evidence was offered to bolster Parkinson's credibility and was thus impermissible because veracity is not a "fact in issue" subject to expert opinion; (2) the evidence at issue would not assist the trier of fact to understand the evidence; and (3) the expert opinion evidence would constitute a direct comment on the guilt or innocence of Parkinson and replace, rather than aid, the jury's function."[378] The trial court also stated that an adequate foundation had not been made for the admission of the testimony.[379]

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[376] Id, at 32.

[377] Id.

[378] Id.

[379] Id, at 33.

Parkinson was convicted by the District Court of the Seventh Judicial District, Madison County, Idaho. He appealed. Among many issues, the defendant argued that the trial court erred by excluding the testimony by Dr. Chappuis and Mr. Welch. In its ruling, the Court of Appeals of Idaho stated that there was no error in the exclusion of the testimony by the two expert witnesses. Delivering the opinion of the Court, Justice Lansing stated that "it was not error for a trial court to exclude from evidence testimony dealing with a scientific theory for which an adequate foundation has not been laid."[380] The Court of Appeals held that there was no showing of the reliability of Dr. Chappuis' assessment technique sufficient to meet standards for admission of the testimony under Rule 702.[381] "Dr Chappuis did not: describe the personality or psychological characteristics that made up the profile; describe the methodology by which the profile was derived; state whether or how the technique had been tested; describe the profile's level of accuracy in distinguishing between offenders and non-offenders; or state whether the profile and the assessment technique utilized by Dr. Chappuis had attracted widespread acceptance within the psychological community."[382] On Agent Welch's testimony, Justice Lansing also stated that:

> Mr. Welch's proffered testimony suffers from similar defects in foundation. Mr. Welch acknowledged that the F.B.I. sex offender profile which he utilized was developed for use by law enforcement officials and that its application was more of an art than science. He did not identify the components of the profile or explain how it was developed, other than noting that its development involved interviews with convicted sex offenders. Mr. Welch did not state whether or

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[380] Id.

[381] Id, at 35.

[382] Id.

> how the resulting profile had been tested for accuracy or identify the technique's error rate. Although Mr. Welch testified that the profile is widely used in the law enforcement community, it is not apparent whether that use is primarily for devising profiles of perpetrators of unsolved crimes or for the purpose for which it was offered in the present case – to determine whether an accused identified by the alleged victim did in fact commit the crime. In short, Mr. Welch's testimony did not provide information from which it could reasonably be ascertained that the profile technique was trustworthy, that it was based upon valid scientific principles, or that it could properly be applied in the manner advocated by Parkinson. Therefore, the trial court did not abuse its discretion by excluding Mr. Welch's testimony.[383]

The Court of Appeals affirmed the trial court's decision.

In *Penson v. State,*[384] offender profiling testimony was also ruled to be impermissible character evidence. Allen Wayne Penson was charged with burglary and two counts of arson, for entering and setting fire to the Walker County Rescue Building and a vehicle. The prosecution stated that a person carrying a sandy-colored bag and fitting the description of the defendant was seen loitering near the building before the fire outbreak. When the police went to search Penson's house, which was about 500 feet from the scene of the arson, they found a sheet of notebook paper (which belonged to one of the members of the rescue building). This member identified the sheet and stated that it must have been taken by Penson at the time of the arson. A sandy-colored bag was also found at Penson's house. Penson also had cuts and scratches on his arm.

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[383] Id.

[384] *Penson v. State, 222 Ga. App.253, 474 S.E.2d. 104 (Ga. 1996).*

At the trial, the State introduced a State fire investigator, Ken Palmer, who testified as an expert on arson. Palmer based his testimony on an FBI serial arsonist profile, titled "Record on Essential Findings of the Study of Serial Arsonists."[385] "Palmer testified that serial arsonists share certain common characteristics including the following: white males between 18-27, loners, educational failures, homosexuals, or bisexuals, history of criminal activity, medical or mental problems, poor employment records, alcohol and drug abuse, and dysfunctional family backgrounds. According to the profile, serial arsonists are mainly walkers who set fires within two miles of their home and act on the spur of the moment, usually for revenge."[386]

The defense raised an objection to this testimony. The defendant argued that the prejudicial effect of the testimony far outweighed its probative value. The defendant also contended that the testimony should be excluded because he was not charged as a serial arsonist and that the profile was not used during the investigation. The motion to exclude Palmer's testimony was denied. The trial judge however, instructed the State not to apply the profile to the defendant, and that the expert should not give an opinion that the defendant was a serial arsonist.

Penson called two witnesses. Daphne Young, who testified that Penson was at her birthday party on the night of the arson. Jeffrey Cameron also testified that Penson was at his house after the party and was there when they heard the fire alarm.

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[385] Id, at 106.

[386] Id.

At the Walker Superior Court, Georgia, Penson was convicted of burglary and two counts of arson and he appealed. The defendant argued that the trial judge erred by admitting the FBI serial arsonist profile. The Court of Appeals of Georgia ruled that the trial court erred by admitting the serial arsonist profile. In the opinion delivered by Justice Harold R. Banke, it was held that the profile evidence was impermissible character evidence. Citing *Sanders v. State,*[387] Justice Banke stated that:

> Unless a defendant has placed his character in issue or has raised some defense which the profile is relevant to rebut, the state may not introduce character evidence showing a defendant's personality traits and personal history as its foundation for demonstrating the defendant has the characteristics of a typical arsonist." ... In this case, the profile did not rebut Penson's alibi defense that he was attending a birthday party at the time the fire originated or aid the jury in determining whether Penson was at the birthday on the night of the fire. Nor had Penson placed his character in issue.[388]

Justice Banke further stated that "the trial court's directive to the State that it not apply the serial arsonist profile to Penson was meaningless given the State's extensive exploration of Penson's personal history and personality traits and the State's transparent efforts to subtly correlate this information to the serial arsonist profile. Even before the State's expert testified, the prosecutor acknowledged that certain seemingly irrelevant exhibits would later become relevant in light of the profile. The admission of the serial arsonist profile was plainly error, and Penson's conviction must be reversed unless it was highly probable that the error did not contribute to the verdict."[389]

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[387] *Sanders v. State, 251 Ga. 70, 76 (3), 303 S.E.2d 13 (1983).*

[388] *Penson v. State, 222 Ga. App.253, 474 S.E.2d. 104, 106 (Ga. 1996).*

[389] Id.

The Court of Appeals reversed the judgment and remanded for a new trial. Justice Banke stated that they were "unable to conclude that it is highly probable that the profile evidence did not contribute to the verdict."[390]

One thing about this case is that the prosecution did not have overwhelming evidence to prove the case beyond a reasonable doubt. Thus, the decision to reverse the trial court's judgment was warranted.

Finally, it should be noted that many states have statutes that provides additional guidelines on the use of character evidence in cases involving sexual offenses. For instance, the California Evidence Code provides that:

(a) Except as provided in this section and in sections 1102 and 1103, evidence of a person's character or a trait of his or her character (whether in the form of an opinion, evidence of reputation, or evidence of specific instances of his of her conduct) is inadmissible when offered to prove his or her conduct on a specified occasion.

(b) Nothing in this section prohibits the admission of evidence that a person committed a crime, civil wrong, or other act when relevant to prove some fact (such as motive, opportunity, intent, preparation, plan, knowledge, identity, absence of mistake or accident, or whether a defendant in a prosecution for an unlawful sexual act or attempted unlawful sexual act did not reasonably and in

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[390] Id, at 107.

good faith believe that the victim consented) other than his or her disposition to commit such an act.

(c) Nothing in this section affects the admissibility of evidence offered to support or attack the credibility of a witness.[391]

Who is Qualified to give Expert Offender Profiling Testimony?

As we mentioned in chapter two, offender profiling is a multi-disciplinary practice. Profilers come from different backgrounds, different academic areas, with varying degrees of experience and knowledge. Hence, there is general disagreement amongst scholars as to who is qualified to give offender profiling testimony. Ultimately, it is the judge who decides who is qualified to give evidence. In United States, the Federal Rule of Evidence 702 provides the guideline for the trial judges. Rule 702 states that:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and method reliably to the facts of the case.[392]

The problems with this Rule have been discussed in the previous chapter. The main problem being the fact that the rule is too loose that almost everybody can qualify as an

[391] CAL. EVID. CODE s 1101 (West. Supp. 1992).

[392] Fed. Evid. R. 702.

expert, either by knowledge, skill, experience, training, or education. There is no acceptable professional body for profilers. This is as a result of the uneasy relationship amongst profilers. Each segment thinks that offender profiling is their exclusive club. Hence, it has been difficult for the different segments to come together as one and move the field forward. Hence, the difficulty with establishing a professional body that will be acceptable by all the different segments.

There are two issues to be borne in mind when discussing the question of who is qualified to give expert profiling testimony. The first is the fact that offender profiling is a multi-disciplinary practice that cuts across many disciplines. The second is the fact that the Federal Rule of Evidence 702 has created a huge dilemma for trial judges. As trial judges have been given the ultimate responsibility to decide who is qualified as an expert testimony, we need to assist them in making that difficult decision. Allowing an unqualified expert to give testimony will/may result in a reversal, plus other dangers associated with that. Therefore, it is important to get it right from the onset.

Brunson v. State[393] is one of the cases that highlight the problem with admitting expert testimony by an unqualified expert. This case also highlights the need to assist trial judges in this regard. Furthermore, this case clearly reveals and supports my argument that the Federal Rule of Evidence 702 is too loose, too liberal. In this case, the defendant, Larry Darnell Brunson was charged with two counts of first-degree murder of his wife (Gloria Brunson) and her lover (Frankie Shaw) in 1999. The State presented several

[393] *Brunson v. State, 349 Ark. 300, 79 S.W.3d 304 (2002).*

witnesses – Gloria's children, law enforcement officers, Gloria's friends and co-workers. The State also presented Barbara Ann Neiss, who was qualified by the trial court as an expert on predictability that a batterer would become a murderer.[394] During her testimony, Neiss stated that she is an expert on profiling batterers and can determine when they are likely to turn into murderers. She testified that there are ten risk factors/characteristics of these sorts of individuals. "She stated that she had taken the ten risk factors from the work of a police officer, Anne O'Dell, who surveyed 70,000 cases and assembled what she thought were ten warning signs that a domestic-violence offender would commit murder."[395] The article by Ms. O'Dell was entitled "Assessing Whether Batterers Will Kill." Ms. Neiss used a three page summary of this article prepared by an attorney, Barbara Hart, and obtained from an internet, in used it in her testimony.[396] Ms. Neiss testified that if more than three of the factors are met, then there is an "incredible duty" to warn a woman of the threat to her safety.[397] According to Neiss, the ten risk factors are as follows:

(1) Threats of homicide against his spouse or children or threats of suicide.

(2) Fantasies of homicide or suicide.

(3) Depression.

(4) Access to weapons.

(5) Obsessive behavior about his wife or family.

(6) Centrality of the battered woman to the batterer's life.

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[394] Id.

[395] *Brunson v. State, 349 Ark. 300, 307, 79 S.W.3d 304 (2002).*

[396] Id.

[397] Id.

(7) Rage against the battered woman.

(8) Drug or alcohol consumption

(9) Abuse of the battered woman's pet animal.

(10) Access to the battered woman.[398]

Neiss gave her qualifications as:

(1) A bachelor's degree in political science and journalism.

(2) A master's degree in public administration.

(3) Studying for a second master's degree in social work.

(4) Have attended several seminars on domestic violence.

(5) Worked for one year with the Arkansas Commission on Child Abuse, Rape and Domestic Violence.

(6) Almost three years employment as an Executive Director for Advocates for Battered Women.

(7) Ten years voluntary work with the Battered Women's Shelter.

(8) Worked at a Mediation Center for battered women and their husbands.

(9) Other work experiences in the domestic violence center.

(10) That she had testified once in a circuit court, several times in a chancery court in support of protective orders, but not as an expert.[399]

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[398] Id, at 307.

[399] Id, at 306.

Neiss testified that her analysis showed that the defendant met eight of these ten risk factors. The defendant raised an objection to the admission of this testimony, arguing that (1) Ms. Neiss was not qualified to render an opinion that he has the characteristics of batterers who may eventually kill, (2) that the testimony embraced the ultimate issue, and (3) that the testimony was unduly prejudicial.

In his ruling, Justice Berlin C. Jones, for the Circuit Court, Jefferson County, Arkansas, qualified Ms. Neiss as an expert, and stated that "she was qualified under Ark.R.Evid. 702, because she possessed specialized knowledge that would assist the jury in understanding the evidence in this case."[400] Neiss's testimony was admitted. The defendant was convicted for the murders and sentenced to two terms of life imprisonment.

The case reached the Supreme Court of Arkansas, where the defendant argued that the trial court abused its discretion by admitting Neiss's testimony as an expert. That the testimony placed him within the characteristics of batterers who kill, and therefore it was unduly prejudicial. The defendant also argued that the testimony fell into the ultimate issue.

Delivering the opinion of the Supreme Court of Arkansas, Justice Robert L. Brown, agreed with the defendant that Neiss was not qualified to render an expert opinion on the predictability that a batterer will become a murderer. Justice Brown said:

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[400] Id.

> The State responds that Ms. Neiss's testimony was helpful to the jury and thus, it qualifies as expert testimony. Yet, in doing so the State only addresses one facet of Rule 702 and never squarely addresses the other facet of whether Ms. Neiss was qualified by knowledge, skill, experience, training, or education to give an opinion that was helpful to the jury. The problem we see with the State's argument is that testimony may be helpful to a jury but still may be properly excluded if that testimony is offered by a person who is not qualified to render the opinion. The trial court, in its ruling, appears to have similarly conflated the issue of a person's qualifications and the "helpfulness of the testimony".[401]

The Supreme Court, citing its prior decision in *Dillion v. State,*[402] reiterated the fact that "while a proffered expert's experience might have been beyond that of persons who had no experience at all in the general area to which he would testify, it was not error to refuse to qualify him as an expert when his knowledge was below the standards of most recognized experts in the subject field."[403]

The Supreme Court also stated that:

> We have no doubt that predicting human behavior, and specifically whether a person has a proclivity to murder based on certain risk factors, requires a highly specialized psychological expertise. Ms. Neiss, while a bona fide expert on domestic abuse, exceeded her expertise by profiling batterers who kill and by conveying to the jury that Brunson fell within that profile. A case in point of Ms. Neiss testifying far beyond her range of expertise was her conclusion that Brunson suffered from depression – one of the ten risk factors. Ms. Neiss did not possess the necessary

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[401] Id, at 310.

[402] *Dillion v. State, 317 Ark.384, 394, 877 S.W. 2d. 915, 920 (1994).*

[403] *Brunson v. State, 349 Ark. 300, 310, 79 S.W.3d 304 (2002).*

> psychiatric background to render such a diagnosis. The trial court abused its discretion in qualifying her to so testify.[404]

The Supreme Court further ruled that Neiss's testimony violated Rule 403 of the Arkansas Rules of Evidence because its prejudicial effect far outweighed its probative value, and also fell on the ultimate issue.[405]

Justice Brown stated that "we believe that her testimony both mandated a conclusion and was unduly prejudicial. After a description of each one of the ten risk factors Mrs. Neiss borrowed from the article by Ms. O'Dell, the prosecutor elicited an opinion from her regarding whether she thought that Brunson met the factors in this case. For eight of the ten factors, Ms. Neiss answered affirmatively."[406] "It is true that the prosecutor did not ask Ms. Neiss specifically whether Brunson killed the victims. Nevertheless, her profile about abusers-turned-murderers and Brunson in particular placed Brunson squarely in the murderer category. This is particularly concerning, since the State's only proof in this case was circumstantial and its theory centered around Brunson's history of domestic abuse and his motive to kill an unfaithful wife and her lover. Ms. Neiss's testimony, in effect, was clear indication to the jury that Brunson was the culprit."[407]

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[404] Id.

[405] Id, at 312.

[406] Id.

[407] Id.

In reversing the judgment and conviction, the Supreme Court of Arkansas concluded that "the profiling of batterers likely to become killers and then placing Brunson within that category was unduly prejudicial to his case and, thus violated Rule 403."[408]

The above case has highlighted the problem that arises when profilers testify beyond their expertise. This is because offender profiling is not well understood by many people including judges. This is compounded by the fact that many criminal profilers have what Professor Risinger and Loop described as "intimidating credentials from the F.B.I."[409] Judges and Jurors seem to be seduced by impressive qualifications. The reliability of such testimony is thereby overlooked. Judges therefore, need assistance/further guidelines when deciding to qualify a criminal profiler as an expert.

Professor Risinger and Loop have suggested that a profiler with intimidating credentials should "not be allowed to reveal his "profiler credentials" to the jury beyond saying that he had worked for many years for the FBI (or other organization) as a specialist in the investigation of sexually driven crimes like rape and sexual homicide, and that in the course of his career, both through research and through involvement in actual cases, he or she had seen the details of many cases."[410] Risinger and Loop also maintained that "such a witness would only testify in regard to

[408] Id, at 315.

[409] Risinger and Loop, supra note 34, at 257.

[410] Id, at 284.

characteristics which in his experience were truly rare in the type of crime involved."[411]

In deciding whether an expert is qualified to give offender profiling testimony, it is submitted that trial judges should first examine closely the purpose why the expert is being called. From there the judge will have better idea as to whether such expert is qualified in the area, assuming the testimony is relevant, and will assist the trier of fact. For example, if an expert is needed on crime scene characteristics, or on *modus operandi*, then a profiler with law enforcement background will be the best qualified person in this area. If expert testimony is needed to show elements of motives and fantasies, especially in sexual offenses, a forensic psychologist or a clinical psychiatrist will be better placed/best qualified to give testimony in this area. A forensic psychiatrist, forensic psychologist or a criminologist is also better qualified to give expert testimony on victimology. Similarly, a profiler with forensic science background will be better placed to testify in cases where there were physical traces and inferences can be drawn from them. However, as we suggested in chapter two, a profiling team made up of the different segments provides the best alternative. In fact this was the case in the early days when DNA profiling was being introduced into the courtroom. Many experts, including geneticists, microbiologists, statisticians, biologists, all came together, and courts began to accept DNA.

It is submitted that in all cases where offender profiling testimony is involved, the trial judge should give a jury directive. The trial judge should inform the jury about

[411] Id.

the level of reliability and validity of offender profiling. This will assist them in determining the weight (if any) to be accorded to the testimony.

Is Offender Profiling too Prejudicial than Probative?

As we mentioned earlier on, offender profiling is a technique based on probability, suspicion, assumption and stereotypes. Stereotyping in particular creates prejudice. Offender profiling involves creating a list of characteristics or character traits and then an individual is placed within that category. This invariably leads judges and jurors into reaching a certain conclusion. Hence, the prejudicial effect usually outweighs its probative value.

Indeed as Professor Ormerod has pointed out, "profile evidence generates great prejudice for the accused who possesses the stated characteristics, yet it is insufficiently probative to point to the accused as being the guilty man rather than someone who has the characteristics of the perpetrator."[412] Professor Ormerod further argued that:

> This clear potential to generate great prejudice triggers some familiar alarm bells. Jurors could choose to convict a defendant who is a paedophile for that reason alone. They may assign a disproportionate weight to the evidence of the paedophilia, or deny the accused the benefit of the doubt and convict on less than the full standard of proof. There is also a very real and even

[412] David C. Ormerod, "The Evidential Implications of Psychological Profiling", Crim. L. Rev. 873 (1996).

> more sinister danger: that the evidence of such traits leads the police to "round up the usual suspects". If the profiler relies on a statistic that, say, paedophiles who murder are usually Caucasian and aged between 45 and 55, there is a risk that the police will only direct their enquiries towards such people, therefore leading to proportionally higher conviction rates of people who fit the bill. This in turn feeds back into and distorts the statistical data from which we began.[413]

It has also been argued that "evidence of discreditable traits of the offender will be transposed in the minds of the jury to the accused. We know that previous convictions, or other discreditable conduct not amounting to a crime, also create in the minds of the jury sinister prejudices."[414] In fact "the most important of these prejudices have recently been described as 'moral prejudice' and 'reasoning prejudice'."[415] Professor Ormerod concluded that the prejudicial effect of profile evidence will in almost all cases substantially outweigh its limited probative value.[416]

Courts are divided on this issue. While many courts have ruled that offender profiling is too prejudicial and therefore inadmissible, many others believe that even if it is prejudicial, that the prejudicial effect does not far outweigh its probative value. It is submitted that the prejudicial effect of offender profiling far outweighs its probative value and therefore, should be ruled inadmissible.

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[413] Id, at 874.

[414] David C. Ormerod., and Jim Sturman, "Working with the Courts: Advice for Expert Witnesses," in Alison, L, (eds), The Forensic Psychologist's Casebook: Psychological Profiling and Criminal Investigation, 185 (2005).

[415] Id.

[416] Ormerod, supra note 412, at 877.

In *State v. Roquemore,*[417] offender profiling testimony was ruled to be too prejudicial to the accused. The Court of Appeals of Ohio stated that profile evidence is based on generalities and typical facts, and that these generalities and typical facts tend to place the defendant into a stereotype.[418] It was held that this stereotyping causes the jury to be prejudiced.[419] Hence, jurors "could decide the facts based on typical, and not the actual, facts."[420]

Similarly, in *Brunson v. State,*[421] the Supreme Court of Arkansas, ruled that "allowing expert to give profiling testimony both improperly mandated a legal conclusion before jury, and constituted prejudicial error."[422] The Supreme Court of Arkansas further stated that "even assuming that profile testimony is in some degree relevant to the issues at trial, the danger of unfair prejudice to the accused has generally been found to outweigh the probative value."[423]

In *People v. Robbie,*[424] the Court of Appeal, First District, Division 3, California, also held that rapist profile testimony resulted in unfair prejudice. Walter Vincent Robbie

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[417] *State v. Roquemore, 85 Ohio App.3d 448, 620 N.E.2d 110 (1993).*

[418] supra at 172.

[419] *State v. Roquemore, 85 Ohio App.3d 448, 620 N.E.2d 110, 115 (1993).*

[420] Id.

[421] supra at 186.

[422] *Brunson v. State, 349 Ark. 300, 79 S.W.3d 304 (2002).*

[423] Id, at 314.

[424] *People v. Robbie, 92 Cal.App.4th 1075 (2002).*

was charged with and convicted by the Superior Court, Contra Costa County, California, of kidnapping Jane Doe, for sexual purposes, oral copulation and penetration with a foreign object.[425]

At the trial, the defendant called witnesses who testified that he is an honest and non-violent man. The defendant also called Jane's ex-boyfriend and Jane's three classmates who testified that Jane was untruthful. Two other witnesses also testified that Jane used drugs. On the other hand, the prosecution called Sharon Pagaling, a special agent with the violent crime profiling unit, in the California Department of Justice, to testify that the defendant's conduct was consistent with a certain type of rapist (the type alleged in this case). The defense raised an objection to the admission of this testimony. The defense argued that the testimony must be "limited to general misconceptions about sex offenders, and that an expert cannot render an opinion as to whether a defendant committed the charged crimes."[426] Pagaling informed the court that her testimony was "to disabuse the jury of common misconceptions about conduct of a rapist."[427]

The trial judge ruled that the testimony was admissible. It is noteworthy to point out that during her testimony, Pagaling acknowledged the fact that the behaviors and conduct that she stated were typical of rape cases, may also be found in non-rape

[425] Id.

[426] Id, at 1081.

[427] Id.

cases. Robbie was convicted and sentenced to an indeterminate term of fifteen years to life and he appealed.

The Court of Appeals ruled that Pagaling's testimony was profile evidence and that profile evidence is generally inadmissible to prove guilt. Justice Corrigan, in the opinion, stated that:

> ... profile evidence is inherently prejudicial because it requires the jury to accept an erroneous starting point in its consideration of the evidence. We illustrate the problem by examining the syllogism underlying profile evidence: criminals act in a certain way; the defendant acted that way; therefore, the defendant is a criminal. Guilt flows ineluctably from the major premise through the minor one to the conclusion. The problem is the major premise is faulty. It implies that criminals, and only criminals act in a given way. In fact, certain behavior may be consistent with both innocent and illegal behavior, as the People's expert conceded here.
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> This flawed syllogism lay at the heart of Pagaling's testimony. She was asked hypothetical questions assuming certain behavior that had been attributed to the defendant and was allowed to opine that it was the most prevalent kind of sex offender conduct. The jury was invited to conclude that if defendant engaged in the conduct described, he was indeed a sex offender.[428]

The Court of Appeals further stated that "profile evidence is unfairly relied upon to affirmatively prove a defendant's guilt based on his match with the profile. The jury is improperly invited to conclude that, because the defendant manifested some characteristics, he committed a crime."[429] The Court ruled that the trial court erred by

[428] Id, at 1085.

[429] Id, at 1086.

admitting the expert testimony. That profile evidence was inadmissible. It was held that the erroneous admission of this testimony was not harmless. Therefore, the Court of Appeals reversed the judgment of conviction and remanded for a new trial. In reversing the judgment, the Court of Appeals stated that "given the highly prejudicial nature of the expert's testimony and the prosecutor's argument, we must conclude there is a reasonable probability that the jury would have reached a result more favorable to defendant had the court excluded Pagaling's testimony."[430]

In the above cases, profile evidence was inadmissible because of its unfair prejudice. However, in several cases, some courts have admitted such evidence even though it was clear that the prejudicial effect far outweighed the probative value. For instance, in *United States v. Webb,*[431] expert testimony on *modus operandi* was admitted and ruled not prejudicial. The United States District Court for the Central District of California convicted Marty Webb of possession of ammunition by a felon. Following an informant's tip off, the Los Angeles Law enforcement officers, on October 17, 1995 arrested the defendant. When the officers searched the defendant's car, they found a loaded gun wrapped in a shirt and concealed in the car's engine compartment.[432] Webb claimed that he did not know that the gun was there.

The State presented a police expert at the trial, who testified on *modus operandi*, "regarding the reasons people typically hide guns in the engine compartment of

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[430] Id, at 1088.

[431] *United States v. Webb, 115 F.3d 711 (1997).*

[432] Id, at 713.

cars."[433] The expert testified that people typically conceal guns in the engine compartment of a car so that they have ready access to them, but police would not easily find them and also to disclaim knowledge of the gun when the police find it. The defendant objected to this testimony, arguing that it was improper and unduly prejudicial and was also inadmissible based on the Evid.R. 704(b), which prohibits an expert's opinion on the ultimate issue. The trial judge permitted the testimony and stated that the police expert witness used the word "people" instead of the word "criminals", hence it was not prejudicial. Furthermore, the trial judge ruled that the expert did not give an opinion on whether the defendant knew that a gun was in his car. Therefore, he ruled that the testimony was admissible. Webb was convicted and he appealed.

At the United States Court of Appeals, Ninth Circuit, Webb contended that the trial court erred by admitting the expert testimony. The defendant also argued that the testimony ought to have been excluded because it was similar to a drug courier profile evidence and also was an opinion on the ultimate issue.[434] The defendant also argued that the trial court ought to have applied the *Daubert* criteria, which would have ruled that the testimony was inadmissible because it was unreliable.

The Court of Appeals, through Justice Trott, ruled that the testimony on *modus operandi* "was relevant to and probative of Webb's knowledge of the gun's presence.

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[433] Id.

[434] Id.

Moreover, the testimony explained evidence about the gun's whereabouts that easily could have been beyond the knowledge of an average juror."[435] Justice Trott further stated that:

> In addition, the trial court and the Government took steps to mitigate the testimony's potential prejudicial effect. The Government focused its questions on the practices of "persons" rather than criminals or gang members. Moreover, even if the jury drew the adverse inference that Webb was a criminal, that inference would not prejudice him because the jury already knew that Webb was a criminal: Webb had stipulated that he had been convicted of three prior felonies.
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> In light of the above, the district court properly determined that the testimony's prejudicial effect did not substantially outweigh its probative value.[436]

On the defendant's contention that the testimony was similar to a drug courier profile evidence, the Court of Appeals ruled that "none of the expert testimony in this case was admitted to demonstrate that Webb was guilty because he fit the characteristics of a certain drug-courier profile. Instead, the expert testimony was properly admitted to assist the jury in understanding the reasons why a person would conceal a weapon in the engine compartment of a car."[437] Justice Trott also stated that the testimony did not violate Evid.R.704(b) which prohibits expert opinion on the ultimate issue.

The Court of Appeals further ruled that the district court did not abuse its discretion by not applying the *Daubert* criteria in this case. It was held that "because the expert

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[435] Id.

[436] Id, at 715.

[437] Id.

testimony in this case constitutes specialized knowledge of law enforcement, not scientific knowledge, the *Daubert* standards for admission simply do not apply."[438]

The Court of Appeals concluded that the trial court did not abuse its discretion by admitting the testimony on *modus operandi* and therefore, affirmed the judgment of conviction. It should be noted that this case took place before the United States Supreme Court decision in *Kumho Tire Co.* in 1999, where it was held that the *Daubert* criteria applied to all forms of expert testimony.

In *Simmons v. State,*[439] offender profile testimony by a crime scene analyst was also ruled not prejudicial. In this case, Clarence Leland Simmons was convicted of intentional murder and capital murder by the Circuit Court, Jefferson County, Alabama. On January 3, 1996 the nude body of a sixty-five year old woman (M.A.) was discovered by a security guard at Highland Manor Apartments in Alabama. The security guard, Alma Underwood, was instructed by the victim's daughter to check on her because she had not heard from her and was worried. When the police arrived, they discovered that M.A. had been stabbed to death and disemboweled.[440] Police investigation revealed that the last person seen with the victim was the defendant and he was arrested for the murder.

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[438] Id, at 716.

[439] *Simmons v. State, 797 So.2d 1134 (Ala. 2000).*

[440] Id, at 1147.

A piece of human tissue found on Simmon's pants was analyzed and the DNA from the tissue matched M.A.'s blood sample."[441] Several items were also collected from the defendant's home. The autopsy was carried out by Dr. Robert Brissie.

> According to Dr. Brissie, M.A's body had been cut by the offender from the upper part of the abdomen, down the front of the abdomen, down across the pubic bone, with several extensive slicing wounds between the legs, then upward on the back of M.A's buttocks, to the back. Additionally, M.A. had been stabbed 73 times; these stab wounds were approximately an inch and half in depth and had marks indicating that the knife used to stab M.A. had a hilt. He testified that six of these incised wounds extended across the front of M.A's neck. Many of these wounds had been inflicted before M.A. died and, according to Dr. Brissie, were probably intimidation wounds and not fatal. Twenty-three of these wounds were concentrated in the chest area, at least five of these wounds did not penetrate the chest cavity and Dr. Brissie opined that some of these wounds were inflicted while M.A. was alive.[442]

Dr. Brissie also testified that "most of M.A's internal organs had been removed from her body. Her left lung was separated into two pieces; her spleen and liver had been cut; most of her large and small intestines were missing."[443]

At the trial, the State called several witnesses. First, Jack Neely testified that he met the defendant and the victim the day before her murder at the South Place Pool Hall, where he had an argument with the defendant and that the defendant threatened to cut him into pieces. Loretta Chambers, a bartender at the Pool Hall, also testified that she witnessed the confrontation and that Simmons was with the victim on that day

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[441] Id, at 1148.

[442] Id.

[443] Id.

(January 2, 1996). Betty Harper also testified that she saw Simmons and M.A. getting into the elevator at M.A's apartment on January 2, 1996. Jerry Trousdale and Alma Underwood who were the maintenance person and security guard at the apartment building respectively, also testified that they saw Simmons enter the apartment with M.A. the day before her murder and that Simmons was the last person seen with M.A.

In order to bolster their claim that the defendant should be convicted of capital offense of murder committed during sexual assault, the prosecution decided to call FBI agent Thomas Neer, who testified that the crime scene analysis showed that the murder was sexually motivated. Neer was qualified by the trial court as an expert on crime scene analysis and victimology. Neer testified that his analysis of the crime scene and the autopsy report showed that the "offense was sexually motivated and that the person who committed the offense did so for sexual gratification."[444] The defendant raised an objection to the admission of this testimony but it was denied.

Simmons was convicted of intentional murder and capital murder and sentenced to death by electrocution. He appealed. Among other claims, the defendant argued that the admission of Neer's testimony by the trial court was error. The defendant argued that Neer's testimony was a novel scientific evidence and therefore, failed to meet *Frye* criteria, which required such testimony to have gained general acceptance in the

[444] Id, at 1150.

relevant scientific community.[445] The defendant also contended that the testimony was unduly prejudicial and violated the ultimate issue rule.

In its ruling, the Court of Appeals of Alabama disagreed with the appellant. Delivering the opinion, Justice Fry said:

> We reject Simmon's argument that Neer's testimony was based on novel scientific evidence. Crime scene analysis and victimology do not rest on scientific principles like those contemplated in *Frye*; these fields constitute specialized knowledge. Specialized knowledge offers subjective observations and comparisons based on the expert's training, skill, or experience that may be helpful to the jury in understanding or determining the facts. Crime scene analysis which involves the gathering and analysis of physical evidence, is generally recognized as a body of specialized knowledge. ... Therefore, because crime scene analysis is not scientific evidence, we conclude that we are not bound by the test enunciated by *Frye*.[446]

Justice Fry further stated that Rule 702, Ala.R.Evid., was the proper standard for admitting Neer's testimony. Justice Fry went on to say that:

> Alabama Rule of Evidence 702 is identical to the Federal Rule of Evidence 702. Fairness to a party seems to dictate that before evidence based on specialized knowledge can be admitted against a party at trial, the party is entitled to a determination that the specialized knowledge is reliable and that it is relevant to a material issue. Once the trial court determines that the testimony involves a legitimate specialized knowledge, that the witness is an expert in that field, and that the expert testimony would assist the jury, a party's rights are adequately protected by the ability to

[445] Id.

[446] Id, at 1151.

> subject witnesses to cross-examination and to attack the basis and methods used in developing the opinion.
>
> Therefore, with the principles enunciated in *Daubert* and *Kumho* in mind, we must determine whether the fields of victimology and crime-scene analysis constitute reliable specialized knowledge; whether Neer is an expert within these fields; and whether the subject matter of his testimony is relevant and assists the trier of fact in this case.[447]

"During defense counsel's cross-examination of Neer, Neer testified that crime-scene analysis of homicides that appear to be sexually motivated began developing as a specialized field in the late 1970s and that the research has been published within the field and subjected to peer review. Neer established the general acceptance of victimology when he testified that numerous law enforcement agencies relied upon crime-scene analysis and victimology when conducting their investigations. Neer detailed the theories supporting crime scene analysis and victimology, the way the theories are applied by others with the same "specialized knowledge," and the way the specialized knowledge was applied in this particular case. He further explained the method in which he conducted his investigation and the factors considered in reaching his determination. We recognize that through interviews, case studies, and research a person may acquire superior knowledge concerning characteristics of an offense. Thus, based on the record before us, adequate evidence was presented to establish the reliability of crime-scene analysis and victimology as fields of specialized knowledge.[448]

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[447] Id, at 1154.

[448] Id, at 1155.

The Court of Appeals further held that "the jury in this case was presented with a homicide trial at which no eyewitnesses testified. M.A.'s body was discovered in a horrifying, mutilated condition. The method and motivation for killing an elderly female presented serious questions for the jury to resolve. Whether the offender received sexual gratification while committing the offense was a critical issue of the case, and Neer's testimony was probative on that issue. Inferences had to be drawn from the physical evidence presented at the crime scene. Neer offered observations of the crime scene and the elderly female victim that would assist the jury in evaluating the circumstances surrounding the murder and the reasons for the method employed by the offender. "A homicide and its crime scene, after all, are not matters likely to be within the knowledge of an average trier of fact" *(United States v. deSoto, 885 F.2d 354, 359 (7th Cir.1989).'"*[449]

In a nutshell, the Court of Appeals ruled that the expert testimony assisted the jury and so its admission by the trial court was not error. The Court also ruled that the testimony was more probative than prejudicial, and did not violate the ultimate rule issue. The Court of Appeals stated that "in this case, Neer frankly conceded the limitations of his testimony. He unequivocally testified that he was not saying that Simmons committed the murder, only that in his opinion the physical evidence from the crime scene and from M.A.'s body indicated that the offense itself was sexually motivated. Neer did not reach a "diagnosis" of sexual abuse and certainly did not

[449] Id, at 1156.

identify the offender; thus, we do not perceive Neer's testimony as testimony on the ultimate issue."[450]

Justice Fry concluded that even if the admission of the expert testimony was error, it would still be ruled as harmless error.[451] The Court of Appeals affirmed the death sentence on the capital murder charge, but "remanded with directions as to sentencing for count 111; and reversed as to conviction and sentence imposed pursuant to count 11."[452]

This case clearly demonstrates my argument that the outcome of any trial involving offender profiling testimony to a great extent is determined by the admissibility standard applied by the trial court. In this case, the Court of Appeals stated that Rule 702 Ala. R.Evid., was the appropriate standard and applied it in this case. On the other hand, the defendant/appellant contended that the *Frye* test standard, which presumably would have excluded the testimony, was the proper standard that ought to have been applied. In this case, the reliability of the testimony seems to have been loosely interpreted by both the trial court and the Court of Appeals. The Courts placed more emphasis on relevance and assistance to the trier of fact, without much enquiry into whether the basis of such testimony was generally accepted by the relevant community. The trial court particularly believed that crime scene analysis

[450] Id, at 1158.

[451] Id.

[452] Id.

and victimology were reliable because "numerous law enforcement agencies relied upon crime-scene analysis and victimology when conducting their investigations."[453] This is a dangerous basis to guage the reliability of any technique. The trial court simply took the expert's words *ipse dixit* and seemed to have been seduced by Neer's impressive qualifications. The usefulness of a technique in assisting in crime investigation should not be taken as an indication that the technique will be sufficiently reliable as to be admissible in the courtroom.

State v. Sorabella[454] contrasts with the above case. In *Sorabella*, the court recognized the fact that profile evidence is prejudicial, but believed that the prejudicial effect can be minimized by limiting the scope of the testimony. In January 2000, the New Britain Police Department, in Connecticut, decided to launch an undercover operation in an attempt to stop the increased violations of the state's child pornography laws via the internet. Detective James Wardwell was one of the detectives assigned to the operation, and on January 4, 2000, he logged onto the America Online (AOL) chat room and posed as a thirteen year old girl, under the screen name "Danutta333.[455] He received an instant message from a man with a screen name – "JoSkotr."[456] They started to exchange instant messages during which "JoeSkotr" asked the thirteen year old girl to meet up with him for sexual relations, telling the girl how she should dress and what he wanted her to do to him and vice versa. He told the girl that he lived in

[453] Id, at 1155.

[454] *State v. Sorabella, 277 Conn. 155, 891 A.2d 897 (2006).*

[455] Id, at 163.

[456] Id.

Massachusetts but will come to Connecticut to meet her at a donut shop. "JoeSkotr" sent pornographic materials to the girl within this time. On March 8, 2000, they agreed to meet up at a donut shop, but "JoeSkotr" went to the wrong shop. He arranged another meeting on March 14, 2000 at a shopping mall. On arrival at the shopping mall, he was arrested by the police.

"JoeSkotr" was identified as John Sorabella, and he was charged with (1) two counts of attempt to commit sexual assault in the second degree, (2) two counts of attempt to commit risk of injury to a child by sexual contact, (3) three counts of attempt to commit risk of injury to a child, (4) one count of attempt to entice a minor to engage in sexual activity, (5) one count of importing child pornography, and (6) one count of obscenity.[457]

At the trial, the State called Kenneth Lanning, a former FBI agent, who testified that the defendant possessed the psychological and behavioral characteristics of child sex offenders. In his testimony, Lanning stated that Sorabella falls under the category of sex offenders called "preferential offenders". Lanning testified that there are what he referred to, as the "customs and habits" of preferential sex offenders and situational sex offenders.[458]

> According to Lanning, situational sex offenders take advantage of opportunistic situations to engage in sex offenses and are typically thought-driven, undertaking action without consideration of getting caught. Lanning

[457] Id, at 160.

[458] Id, at 212.

> testified further that preferential sex offenders are individuals who have specific sexual preferences for certain activities or victims and whose behavior is normally need-driven or fantasy-driven. Preferential sex offenders typically collect pornography, erotica and mementos relating to their sexual interest or preference and spend a great deal of time and money in fulfilling their sexual needs or fantasies. With respect to preferential sex offenders with an interest in children, they may use child pornography to rationalize abhorrent behavior, fuel and reinforce their sexual arousal or lower a potential victim's inhibitions by conveying the message that other children are doing it. Preferential sex offenders typically will engage in a prolonged and elaborate grooming or seduction process that is designed to exploit and manipulate vulnerable children. Preferential sex offenders may lessen the grooming time by targeting a child who is sexually experienced.[459]

The defendant filed a motion in limine to exclude the testimony, but it was denied. The defense counsel argued that the State failed to demonstrate the admissibility of the testimony as required in the decision in *State v. Porter,*[460] when a scientific evidence is being presented. The defense also argued that the testimony should not be admitted because of its prejudicial effect. Denying the motion, the trial court stated that Lanning's testimony was not scientific, and so *Porter* does not apply. However, the court instructed the expert to limit his testimony only to 'customs and habits' of preferential sex offenders. That the expert should not state his opinion on the

[459] Id, at 213.

[460] *State v. Porter, 241 Conn. 57, 698 A.2d 739 (1997). Cert.denied, 523 U.S.1058, 118 S.Ct. 1384, 140 L.Ed. 2d 645 (1998).*

defendant's state of mind or whether he fits the characteristics of the preferential sex offenders.[461]

The trial court admitted the testimony and stated that its probative value outweighed its prejudicial effect. The trial court also stated that the testimony was relevant to "the defendant's intent in engaging in the behavior, his belief as to the age of Danuta333 and whether his conduct was corroborative of his purpose as at least the start of a line of conduct leading naturally to the crime."[462]

The defendant was convicted by the jury on all counts and was sentenced to ten years imprisonment, execution suspended after five years, and fifteen years probation.[463] The defendant appealed and the case reached the Supreme Court of Connecticut. Among other issues, the defendant argued that the trial court abused its discretion by not subjecting Agent Lanning's testimony to a *Porter* hearing. The defendant also argued that the prejudicial effect of the testimony far outweighed its probative value.

The Supreme Court of Connecticut affirmed the lower court's judgment and stated that the expert testimony was not scientific. Therefore, a *Porter* hearing was not required. The Supreme Court stated that:

> The trial court reasonably concluded that Lanning's testimony was relevant and likely to assist the jury in

[461] *State v. Sorabella, 277 Conn. 155, 212, 891 A.2d 897 (2006).*

[462] Id.

[463] Id, at 162.

> light of the nature of the charges and Lanning's experience and expertise in matters relating to the victimization of children. The court also carefully evaluated the potential prejudicial effect of the testimony and reasonably concluded that its probative value outweighed any such effect. Moreover, the court guarded against the possibility of undue prejudice by limiting the scope of Lanning's testimony to 'customs and habits' of preferential sex offenders in general and by prohibiting Lanning from expressing any opinion either about the defendant's mental state or about whether the defendant fit the profile of a preferential sex offender. We conclude, therefore, that the trial court did not abuse its discretion in concluding that the probative value of Lannings' testimony outweighed any prejudicial effect.[464]

The Supreme Court of Connecticut therefore, affirmed the judgment of conviction.

Is Offender Profiling an Opinion on the Ultimate Issue?

First, what is ultimate issue rule? The Ultimate Issue Rule is a rule which prohibits an expert, lay or expert, from giving an opinion on an issue of law or fact which is for the court to decide. Hence, "ultimate issues in criminal trials may be defined as the ultimate, sometimes called material facts which must be proved by the prosecution beyond reasonable doubt before a defendant can be found guilty of a particular offence and those facts, if any, which must be proved by the defendant in order to avoid guilt for that offence."[465] All witnesses are barred from testifying on the

[464] Id, at 217.

[465] Colin Tapper, Cross and Tapper on Evidence, 551 (1995).

ultimate issue to be decided by the court, which is the issue of guilt or innocence. Testifying on the ultimate issue is seen as usurping the function of the trier of fact, an invasion of the province/ken of the jury.

The ultimate issue rule has faced a lot of criticism. McCormick was very critical of the ultimate issue rule. He maintained that "this general rule is unduly restrictive, is pregnant with close questions of application, and often unfairly obstructs the party's presentation of his case."[466] McCormick further argued that "even the courts which profess adherence to the rule fail to apply it with consistency. All such courts, for example, disregard the supposed rule, usually without explanation as to why it should not be applied, when value, sanity, handwriting and identity are in issue."[467]

Wigmore also maintained that the phrase "usurping the function of the jury" is "a mere bit of empty rhetoric." He contended that:

> There is no such reason for the rule, because the witness, in expressing his opinion, is not attempting to "usurp" the jury's functions; nor could if he desired. He is not attempting it, because his error (if it were one) consists merely in offering to the jury a piece of testimony which ought not to go there; and he could not usurp it if he would, because the jury may still reject his opinion and accept some other view, and no legal power, not even the judge's order, can compel them to accept the witness' opinion against their own."[468]

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[466] McCormick, supra note 217, at 26.

[467] Id.

[468] John H. Wigmore, Evidence in Trials at Common Law, volume 7, revised by James H. Chadbourn, s 1920, 18 (1978).

"Furthermore, the rule if carried out strictly and invariably would exclude the most necessary testimony. When all is said, it remains simply one of those impracticable and misconceived utterances which lack any justification in principle."[469]

Friedland et al argued that the ultimate issue rule "often made it unreasonably difficult for advocates to present their cases, forcing the witnesses into verbal contortions to avoid the disfavored magic phrasing."[470] Similarly, Jackson maintained that the "the rule is superfluous and that cases which have recently excluded evidence on the grounds of the rule can be supported on other grounds."[471] Keane also argued that "the objection of undue influence makes no allowance for cases in which the tribunal of facts is a professional judge rather than a jury, overlooks the frequency of conflicts in expert testimony and is largely incompatible with the very justification for admitting expert evidence, that the drawing of inferences from the facts in question calls for an expertise which the tribunal of facts does not possess."[472]

Following the criticisms, the ultimate issue rule has been abolished in many jurisdictions. Some jurisdictions added certain exceptions to the rule. In United States, the Federal Rule of Evidence 704 provides the guideline on the ultimate issue. The Rule states that:

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[469] Id.

[470] Friedland, Bergman and Taslitz, supra note 175, at 262.

[471] J. D. Jackson, "The Ultimate Issue Rule: One Rule Too Many," Crim. L.R. 75 (1984).

[472] Adrian Keane, The Modern Law of Evidence, 407 (1985).

Rule 704. Opinion on Ultimate Issue

(a) Except as provided in subdivision (b), testimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact.

(b) No expert witness testifying with respect to the mental state or condition of a defendant in a criminal case may state an opinion or inference as to whether the defendant did or did not have the mental state or condition constituting an element of the crime charged or of a defense thereto. Such ultimate issues are matters for the trier of fact alone.[473]

Courts have been inconsistent with their decisions on the ultimate issue when it comes to offender profiling evidence. In some cases, offender profile evidence has been ruled inadmissible based on the ultimate issue, while in many others, it has been seen as not an opinion on the ultimate issue.

In *State v. Armstrong,*[474] the Court of Appeals of Louisiana, Fourth Circuit, ruled that expert testimony regarding the "psychological dynamics" of the defendant was "inadmissible expression of opinion as to defendant's innocence." Craigory A. Armstrong was charged with aggravated rape of his eight year old cousin. On the day of the rape, the girl was sleeping in her mother's house, when the defendant (who also lived there), raped her. The victim told her twelve year old sister about the rape

[473] Fed.Evid.R. 704.

[474] *State v. Armstrong, 587 So.2d 168 (La. 1991).*

but they did not tell their mother. It was reported that two days later, the girl complained of stomach cramps and was taken to Dr. Gregory Molden's clinic. The medical tests showed that the girl had gonorrhea. Dr. Molden therefore, contacted the child protection bureau of New Orleans Police Department. Interviews with the victim and her sister revealed the rape and Armstrong was arrested.

During police interrogation, Armstrong admitted having sexual intercourse with the eight year old girl, but claimed that the girl initiated it.[475] He also claimed that he once had gonorrhea, but thought that it had been cured. At trial, he called three witnesses who attested to his credibility. He also called a clinical psychologist who testified that his "psychological dynamics would not support the view of him being a child sexual perpetrator."[476]

The prosecution objected to the admission of this testimony. In its ruling, the Criminal District Court, Parish of Orleans, excluded the testimony. Justice George V. Perez stated that "the testimony of Armstrong's expert would have been an expression of opinion as to Armstrong's innocence."[477] The petit jury convicted Armstrong of forcible rape and he was sentenced to twenty-five years, at hard labor.[478] He appealed his conviction and contended that (1) the trial court erred by excluding the testimony by the clinical psychologist which showed that he did not

[475] Id, at 169.

[476] Id, at 170.

[477] Id.

[478] Id, at 169.

have the 'psychological dynamics' of child sex offenders; (2) that the trial court also erred by making his confession known to the jury.

The Court of Appeals of Louisiana, Fourth Circuit, ruled that the exclusion of expert testimony by the clinical psychologist was not error. The Court of Appeals stated that under the Louisiana Code of Evidence Art.704, regarding opinion on ultimate issue, that "an expert shall not express an opinion as to the guilt or innocence of the accused."[479] Delivering the judgment, Justice Ward said: "In this case, where the expert would give an opinion as to the innocence of Armstrong, the trial court did not abuse that discretion. As a matter of fact, that testimony was not admissible."[480] The Court of Appeals therefore, affirmed the trial court's judgment and sentence.

Other cases where profile testimony was ruled inadmissible based on the ultimate issue include *State v. Haynes*,[481] where it was held that:

> The testimony as to timing and panic embraced the ultimate issue of intent to be decided by the jury. Under Evid.R. 704, "opinion testimony on an ultimate issue is admissible if it assists the trier of the fact, otherwise it is not admissible. The competency of the trier of the fact to resolve the factual issue determines whether or not the opinion testimony is of assistance." For this reason, an ultimate issue opinion by an expert should be excluded in extreme cases where that opinion is inherently misleading or unduly prejudicial.[482]

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[479] Id, at 170.

[480] Id.

[481] supra at 167.

[482] *State v. Haynes, 1988 WL 99189, 3, 4 (Ohio App. 9 Dist.).*

Similarly, in *State v. Parkinson,*[483] the Court of Appeals of Idaho ruled that the admission of expert testimony on sex offender profiles was an opinion on the ultimate issue. The Court of Appeals upheld a trial court's ruling that "the expert opinion evidence would constitute a direct comment on the guilt or innocence of Parkinson and replace, rather than aid, the jury's function."[484]

The Supreme Court of Arkansas in *Brunson v. State*[485] also ruled that expert testimony on the predictability of batterers who would become murderers was an opinion on the ultimate issue. In this case, The Supreme Court of Arkansas held that the "profile testimony both mandated a conclusion and was unduly prejudicial."[486]

It should be noted however, that in *United States v. Webb,*[487] the United States Court of Appeals, Ninth Circuit, ruled that expert testimony on *modus operandi*, regarding the reasons why people conceal weapons in the engine compartment of cars was not impermissible opinion on the ultimate issue. In this case, the United States Court of Appeals said:

> Webb next argues that the expert testimony was inadmissible because it constitutes testimony on his state of mind, in violation of Federal Rule of Evidence 704(b). Rule 704(b) prohibits an expert from stating his opinion

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[483] supra at 178.

[484] *State v. Parkinson, 128 Idaho 29, 32, 909 P.2d 647, 650 (1996).*

[485] supra at 186.

[486] *Brunson v. State, 349 Ark. 300, 312, 79 S.W.3d 304 (2002).*

[487] supra at 199.

> on the ultimate issue of whether a defendant had the particular mental state at issue.
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> The expert in this case described a typical situation, and never offered any opinion about whether Webb knew the weapon was hidden in his car. The expert testified about a typical way people conceal weapons in cars and the typical reasons for their concealment. In fact, on cross-examination, the expert admitted that he had no information that Webb knew the weapon was in the engine compartment. Under these circumstances, it was left to the jury to determine whether Webb knew the gun was hidden in the car. Thus, the expert did not give an impermissible opinion under Rule 704(b).[488]

In *Simmons v. State*,[489] expert testimony by an FBI agent that the crime scene characteristics indicated that the murder was sexually motivated and so the offender received sexual gratification from the acts was ruled not a violation of the ultimate issue rule. The court said: "in this case, Neer frankly conceded the limitations of his testimony. He unequivocally testified that he was not saying that Simmons committed the murder, only that in his opinion the physical evidence from the crime scene and from M.A.'s body indicated that the offense itself was sexually motivated. Neer did not reach a "diagnosis" of sexual abuse and certainly did not identify the offender; thus we do not perceive Neer's testimony as testimony on the ultimate issue."[490]

In the final analysis, it does appear that ultimate issue is in-built in all forms of offender profile evidence. By that we mean that no matter how or which form or shape offender profile is being presented, there is the over-lapping tendency to touch

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[488] *United States v. Webb, 115 F.3d 711, 715 (1997).*

[489] supra at 202.

[490] *Simmons v. State, 797 So.2d 1134, 1158 (2000).*

on the ultimate issue. Offender profile testimony and its derivatives are generally geared towards one thing – pointing to the accused as being either guilty or innocent. In effect, profile evidence is a 'leading' evidence. It leads to a certain conclusion. It should be noted however, that with appropriate jury instruction by the trial judge, this problem can at least be minimized. The trial judge should in all cases, limit the scope of the testimony and remind the witnesses of their role to testify and not to decide the case. We are in support of the ultimate issue rule, at least in cases involving offender profiling, as without it witnesses will go beyond their function to assist with their testimony, and extend their role into that of final arbiters. The result will then be a trial by witnesses rather than trial by judges and jurors.

Is Offender Profiling Sufficiently Reliable as to be Admissible?

Offender profiling is not sufficiently reliable as to be admissible. Offender profiling involves gathering information from various sources – from the crime scene, witnesses, victim statements, autopsy reports, offender's physical characteristics, age, race, criminal records, and so on. The question then is – how reliable is information gathered in this manner/from these sources? Should it be tendered in court as an indication or proof of guilt or innocence? Offender profiling does not point to specific offenders. It cannot determine that a given defendant committed a specific act. Offender profiling only predicts, it suggests, but it cannot prove. We should also bear in mind the problem posed by crime scene 'staging', which could lead to profiling

being based on inaccurate crime scene analysis. Fundamentally, offender profiling is very useful in narrowing down the suspects during crime investigation, but it has not reached the level of reliability necessary for courtroom use. The *modus operandi* of offenders may assist judges and jurors in understanding the behavioral patterns in some cases, but that alone is not a sufficient basis to warrant its admission in court, nor is that an adequate proof that the technique is reliable.

Many scholars agree that offender profiling is not a reliable technique. It is a technique whose foundation or scientific basis cannot be ascertained at the moment. Godwin maintained that, "Nine out of ten profiles are vapid. They play at blind man's bluff, groping in all directions in the hope of touching a sleeve. Occasionally they do, but not firmly enough to seize it, for the behaviourists producing them must necessarily deal in generalities and types. But policemen can't arrest a type. They require hard data: names, dates, none of which the psychiatrists [or others involved in creating profile evidence] can offer."[491]

Alison et al noted that "there remains no evidence that the scientific community has accepted the technique as an accurate or reliable indicator of identification of an offender. Therefore, it would probably not be surprising to learn that police officers remain relatively unaware of the benefits and limitations of profiling and of the ways

[491] Godwin, J., Murder USA: The Ways We Kill Each Other, 276 (1978).

in which they should or should not be utilized. It is incumbent upon the profiler to outline the expectations that officers had of the account."[492]

Professor Risinger and Loop maintained that "while still a valuable investigatory tool perhaps, the existing data does not indicate that process of offender profiling results in sufficiently reliable information to support evidentiary admissibility."[493]

On a similar vein, Professor Ormerod and Sturman maintained that "the psychological profile has serious limitations: it is practiced in an inconsistent manner, often from unverified base of material by a body of individuals with diverse levels of training and experience, and inadequate independent monitoring and review."[494] They concluded that "psychologists face the struggle of demonstrating the reliability of the technique and of the people who practice it."[495]

Snook et al carried out a narrative review of 130 articles on criminal profiling and meta-analytic reviews and concluded that criminal profiling "appears at this juncture to be an extraneous and redundant technique for use in criminal investigations."[496] They also concluded that criminal profiling "will persist as a pseudoscientific

[492] Alison, L., West, A., and Goodwill A, "The Academic and the Practitioner Pragmatists' Views of Offender Profiling", 10 Psychol. Pub. Pol'y & L. 78 (2004).

[493] Risinger and Loop, supra note 34, at 252.

[494] Ormerod and Sturman, supra note 414, at 191.

[495] Id.

[496] Brent Snook., Joseph, Eastwood., Paul Gendreau., Claire Goggin., and Richard M. Cullen, "Taking Stock of Criminal Profiling: A Narrative and Meta-Analysis", Criminal Justice and Behavior, vol. 34, No. 4, 437, 448 (2007).

technique until such time as empirical and reproducible studies are conducted on the abilities of large groups of active profilers to predict, with more precision and greater magnitude, the characteristics of offenders."[497]

As we stated in chapter three, the rules guiding the admissibility of expert testimony in United States, emphasize the reliability of any expert evidence. Yet, in many cases involving offender profiling the reliability of the technique was not questioned, as in *State v. Pennell.*[498] However, some courts agree that offender profiling is unreliable and have ruled it inadmissible.

In *State v. Cavallo*[499] for instance, the Supreme Court of New Jersey stated that the technique is not generally accepted as being reliable. In this case, two defendants, Michael Cavallo and David R. Murro were convicted of rape, abduction and private lewdness. On June 16, 1977 the two defendants met the victim (S.T.) at the Pittstown bar in Hunterdon, New Jersey. The victim who was two months pregnant at the time of the alleged rape, claimed that the defendants abducted her from the bar and took her to an empty field where she was raped. The defendants on the other hand, claimed that they had consensual sexual encounter with S.T. The two sides gave conflicting versions of events that took place that night. There were no eye witnesses.

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[497] Id.

[498] *State v. Pennell, 602 A.2d 48 (Del.1991).*

[499] *State v. Cavallo, 88 N.J 508, 443 A.2d 1020 (1982).*

At the trial, Cavallo sought to introduce testimony from a psychiatrist, Dr. Kuris which will show that he does not have the psychological traits of a rapist.[500] The defense informed the court that Dr. Kuris was being proffered to testify as to "Mr. Cavallo's character which is that he knows right from wrong, that he is a well-meaning individual, he would not willfully do a wrong, he recognizes the force and violence of rape are wrongful acts, he is non-violent, non-aggressive person and he will also testify to the fact the physical or the characteristics exhibited by rapists in his experience as a psychiatrist are these people are aggressive, violent people and that Mr. Cavallo does not fit within this mold."[501]

The prosecution argued that the testimony should be excluded because it was irrelevant and not reliable. The prosecution contended that the expert character evidence was irrelevant "since regardless of whether Cavallo has the characteristics of a "rapist", he may indeed have committed rape on this particular occasion."[502] The Hunterdon County Superior Court ruled that the testimony was inadmissible. The defendants were convicted. Cavallo was sentenced to three to five years for abduction, one to two years for lewdness and ten to twenty years for rape. Murro was sentenced to three to seven years for abduction, two to three years for lewdness and twelve to twenty years for rape.[503] Their request for a new trial was denied. The case went to the Superior Court, Appellant Division.

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[500] Id.

[501] Id, at 511.

[502] Id, at 515.

[503] Id, at 513.

The appellate division agreed with the trial court's decision to exclude the expert testimony. It was held that the expert character testimony was inadmissible under Rule 47, which governs the admissibility of character evidence.[504] The appellate division stated that "the rule could not contemplate testimony of the kind proffered in this case"[505], and that the admission of such testimony "could divert the attention of the jury from factual guilt or innocence to the defendant's propensities."[506] The appellate division affirmed the convictions but remanded the trial for re-sentencing, as the court deemed the sentences excessive. The defendants each later received ten to fifteen years for rape and lesser sentences on the abduction and private lewdness charges.

The case reached the Supreme Court of New Jersey where the defendants argued that the exclusion of the expert character evidence was error. In their ruling, the Supreme Court stated that the evidence by Dr. Kuris was not generally accepted as being reliable. Delivering the judgment, Justice Pashman stated that the "defendants have thus failed to persuade us that the proffered evidence has been accepted as reliable by other jurisdictions, or for other purposes in the New Jersey legal system. Defendants therefore have not met their burden under Rule 56 of showing that Dr. Kuris' testimony is based on reasonably reliable scientific premises."[507] In a footnote, the

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[504] Id.

[505] Id.

[506] Id, at 514.

[507] Id, at 526.

Supreme Court noted that "even if psychiatric testimony of this nature were found to be generally admissible, we would have serious questions about whether the foundation for Dr. Kuris' testimony – only two meetings with Cavallo – is sufficient to support the conclusions drawn about his personality and propensities."[508]

The Supreme Court of New Jersey affirmed the appellate division's judgment and concluded that the "defendants have not met their burden of showing that the scientific community generally accepts the existence of identifiable character traits common to rapists. They also have not demonstrated that psychiatrists possess any special ability to discern whether an individual is likely to be a rapist. Until the scientific reliability of this type of evidence is established, it is not admissible."[509]

In *State v. Lowe,*[510] expert testimony on offender's behavioral motivations was also ruled inadmissible. The defendant, Terry Lowe was charged with two counts of aggravated murder of Phyllis Mullet and Murray Griffin. On July 5, 1986, Phyllis Mullet was at her home in Belle Center, Ohio, when she was stabbed to death, multiple times, with her throat cut.[511] Murray Griffin, a Belle Center Marshall was at the scene, attending to the victim, when the perpetrator shot him and he also died at the scene. When the trial began, the State filed a notice of intention to call FBI agents who will testify on crime scene characteristics, which will assist in the identification

[508] Id.

[509] Id, at 529.

[510] *State v. Lowe, 75 Ohio App.3d 404, 599 N.E.2d 783 (Ohio. 1991).*

[511] Id.

of Lowe as the person who committed the murders. The State informed the court that the FBI agents will testify regarding the psychological profile of the offender. That FBI Agent John Douglas will testify on criminal investigative analysis and death threat analysis. That Agent Douglas will testify regarding the offender's motivation for the murder of Mullet, as well as the motivation behind a certain document that Lowe had written.[512] It was reported that this document contained a list of women and the names of their immediate family members and that the document contained sexual languages and that Mullet's name was on the list.[513]

In his testimony, Agent Douglas stated that based on his review of the crime scene photographs, autopsy reports, police reports and the document written by Lowe, that he was of the opinion that the murder of Phyllis Mullet was sexually motivated. He testified that his opinion was based on (1) "the fact Mullet's hands and feet were bound with ligatures that had been brought to the scene by the perpetrator of the crime," the "presence of the ligatures indicated preplanning on the part of the perpetrator," and that preplanning is one of the characteristics of sexually motivated murders.[514] Agent Douglas further stated that the document written by Lowe was sexually motivated and represented the perpetrator's plan or mission for power.[515] It should be pointed out that during cross-examination, Agent Douglas acknowledged

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[512] Id, at 406.

[513] Id.

[514] Id.

[515] Id.

the fact that his testimony on the motivations could not be "stated to a reasonable scientific certainty."[516]

The defendant presented Dr. Solomon Fulero, a psychologist, to rebut Douglas's testimony. In his testimony, Dr. Fulero also acknowledged the fact that "opinions based on criminal-investigative analysis do not rise to the level of reasonable scientific certainty that is a prerequisite to consideration as expert opinion testimony."[517]

In its ruling, the trial court granted the defendant's motion to suppress Agent Douglas' testimony. The State appealed, after certification of its inability to proceed to trial without the suppressed testimony. The State argued that the trial court erred in granting the motion to suppress the testimony.

The Court of Appeals of Ohio, Third District, reiterated the fact that a trial judge has the discretion to decide whether any evidence is relevant and will assist the trier of fact to understand the evidence or to determine a fact in issue. The Court of Appeals said:

> In this case before us, the trial court suppressed the testimony of Douglas upon finding, *inter alia,* that "Mr. Douglas' opinion is an investigative tool like a polygraph; it might be used to investigate, but it does not have the reliability to be evidence." Having given careful consideration to the testimony elicited in this matter, we conclude that there is evidence in the record to support

[516] Id, at 407.

[517] Id.

> the trial court's finding that the opinion testimony of Douglas is not reliable evidence.
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> As a whole, the record reflects that Douglas's opinion for the most part is based on the behavioral science of clinical psychology, an area in which he has no formal education, training or license. In short, the purported scientific analytical processes to which Douglas testified are based on intuitiveness honed by his considerable experience in the field of homicide investigation. While we in no way trivialize the importance of Douglas' work in the field of crime detection and criminal apprehension, we do not find that there was sufficient evidence of reliability adduced to demonstrate the relevancy of the testimony or to qualify Douglas as an expert witness. Accordingly, the error as assigned by the state is overruled.[518]

The Court of Appeals therefore, affirmed the trial court's decision to suppress Agent Douglas' testimony.

Similarly, in *State v. Stevens,*[519] the Supreme Court of Tennessee affirmed a trial court's decision to exclude expert testimony on crime scene analysis. In excluding the testimony, the trial court stated that it was not "convinced that this type of analysis has been subject to adequate objective testing, or that it is based upon longstanding, reliable, scientific principles."[520] In *Stevens*, the defendant William Richard Stevens was charged with two counts of first-degree premeditated murder of his wife, Sandi Stevens and his mother-in-law Myrtle Wilson. He was also charged with one count of aggravated robbery. On December 22, 1997 the defendant called the police and when

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[518] Id, at 408.

[519] *State v. Stevens, 78 S.W.3d 817 (Tenn.2002).*

[520] Id, at 831.

the police arrived at his mobile home in Nashville, Tennessee, they found the defendant, his friend Corey Milliken and the bodies of the victims. It was reported that Mrs. Stevens' nude body was "left in a "displayed" position, which is, lying on her back with her legs spread apart."[521] Pornographic magazines and Sandi's own nude photographs were also found around her body.[522] Wilson's nightgown was pulled above her waist. The police found no sign of a forced entry into the apartment. The police suspected that the house showed signs of "staging" and so Stevens and Milliken were the immediate suspects. While the police were questioning Milliken, they noticed blood stains on his shirt, under his nails and gouge marks on his wrist and cheek.[523] Milliken confessed that Stevens had hired him to kill his wife and make it look like a robbery. The medical examination revealed that Sandi Stevens died as a result of ligature strangulation. That she also had a tear in her vagina. The medical examination showed that Wilson died as a result of stab wounds and manual strangulation.

At the trial, the State presented several witnesses, including Shawn Austin Milliken, the junior brother of Corey Milliken, who testified that in 1997 Stevens offered him and his brother $2,500 each to kill his wife. He testified that he later decided not to go on with the plan and so Corey accepted $5,000 to carry out the murder on his own. The State also presented evidence of Steven's conviction in 1997 for second degree

[521] Id, at 826.

[522] Id.

[523] Id, at 825.

murder. During the trial, Stevens claimed that Corey Milliken killed Sandi and Myrtle during his sexual assault on them. He argued that he did not hire Corey to kill the two women. The defense decided to call Mr. Gregg McCrary, a former FBI Agent and an expert on crime scene analysis. McCrary was called to testify that "Milliken committed sexual murder as an act of aggression precipitated by an argument with his mother and step-father the night before the crimes."[524] "Mr. McCrary testified that the display of pornographic magazines around Mrs. Stevens could "best be interpreted as an attempt to further humiliate or degrade" the victim, which goes to the motive of a sex crime." He defined a sex crime as primarily a crime of violence in which the perpetrator uses sex to punish, humiliate, and degrade the victim."[525] McCrary testified outside the jury. He stated that from his analysis of the crime scene photos, the crime scene video tapes, the autopsy report and Sandi Steven's diary, he was of the opinion that the crime scene indicated characteristics of a "disorganized sexual homicide."[526] As such, that the murders were sexually motivated. In his testimony, McCrary also made distinctions between the characteristics of "disorganized sexual homicide crime scene" and a "contract murder crime scene."[527] McCrary said:

> The crime scene is quite sloppy and in great disarray. There is minimal use of restraints. The sexual acts tend to occur after death; so, there is post-mortem injury to the victim ... indication of post-mortem sexual activity. The body is left at the death scene and is typically left in view. There's a good deal of physical evidence that's – that's left at the scene. And, anytime just a

[524] Id, at 827.

[525] Id, at 828.

[526] Id, at 830.

[527] Id.

> weapon of opportunity that the offender uses, and by that, I mean a weapon that is contained at the scene, uses it and then, it's not uncommon for the offender to leave that weapon either at or near-near the scene.[528]

McCrary further testified that "criminals usually commit disorganized violent crimes as a result of some "precipitating stressors, or stressful event" in the criminal's life. Such an event invokes a lot of anger in the offender, and that anger – transferred onto the victim – triggers this violent behavior."[529] He also stated that his crime scene analysis indicated that more than one person committed the murders and that the crime scene also showed elements of 'staging.'

The reliability of McCrary's testimony was questioned during cross-examination.

> On cross-examination, Mr. McCrary testified that the FBI had conducted a study to determine the accuracy rate of its crime scene analysis. The results of that study yielded a seventy-five to eight percent accuracy rate. He presented as further evidence of the reliability of crime scene analysis the FBI's increased number of trained agents in this field from seven to forty. Although Mr. McCrary acknowledged that crime scene analysis "is not hard science where you can do controlled experiments and come up with the ratios in all this," he said that "the proof that there is validation and reliability in the process is that it's being accepted. It's being used and the demand is just outstripping our resources to provide it.[530]

In its ruling, the trial court qualified McCrary as an expert on crime scene staging and he was allowed to testify that the murders could be the work of more than one person.

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[528] Id.

[529] Id.

[530] Id, at 831.

The court however, ruled that McCrary's testimony would not be admitted on the issue of the motives for the murders. The trial court stated that "while the expert and many of the other FBI profilers are a tremendous asset as an investigative tool in law enforcement, the expert's testimony regarding the motivation of the suspect could not comply with the Tennessee Rule of Evidence 702 in terms of substantially assisting the trier of fact, because there is no trustworthiness or reliability."[531]

The trial court also stated that it was not "convinced that this type of analysis has been subject to adequate objective testing, or that it is based upon longstanding, reliable, scientific principles."[532] Justice Steve Dozier, delivering the judgment, also stated that the testimony could not satisfy the *McDaniel*[533] test of scientific reliability.

It should be noted that Stevens also called other witnesses, including family members, co-workers, and neighbors, who testified that he was a good father, a good and hardworking employee and always helped his neighbors.[534]

Stevens was found guilty by the Criminal Court, Davidson County, Tennessee, and sentenced to death for the murders and also sentenced to life without parole on the

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[531] Id.

[532] Id.

[533] McDaniel v. CSX Transportation, Inc., 955 S.W. 2d 257, 264-65 (Tenn. 1997); which held that the *Daubert* factors also applied to non-scientific testimony.

[534] *State v. Stevens, 78 S.W.3d 817, 828 (Tenn.2002).*

aggravated robbery charge. Corey Milliken pleaded guilty to first-degree murder and was sentenced to life imprisonment.

The Court of Appeals affirmed the trial court's judgment of conviction and the sentence. The case automatically went to the Supreme Court of Tennessee, as it was a death sentence for first degree murder.[535]Among other issues, the Supreme Court addressed the issue of whether the trial court erred by limiting McCrary's testimony. The Supreme Court agreed with both the trial court and the Court of Appeals decisions and held that *McDaniel* applied to both scientific and non scientific testimony.

On the issue of the reliability of the expert's testimony, the Supreme Court stated: "Consequently, we are reluctant to measure the reliability of expert testimony that is not based on scientific methodology under a rigid application of the *McDaniel* factors. However, we are equally reluctant to admit nonscientific expert testimony based on an unchallenged acceptance of the expert's qualifications and an unquestioned reliance on the accuracy of the data supporting the expert's conclusions."[536]

Delivering the judgment of the Supreme Court, Justice Barker further stated that:

> This type of crime scene analysis, developed by the FBI as a means of criminal investigation, relies on the expert's

[535] In accordance with Tenn. Code. Ann.s 39-13-206(a)(1)(1997).

[536] *State v. Stevens, 78 S.W.3d 817, 833 (Tenn. 2002).*

> subjective judgment to draw conclusions as to the type of individual who committed this crime based on the physical evidence found at the crime scene. Although we do not doubt the usefulness of behavioral analysis to assist law enforcement officials in their criminal investigations, we cannot allow an individual's guilt or innocence to be determined by such "opinion evidence connected to existing data only by the ipse dixit" of the expert. Essentially, the jury is encouraged to conclude that because this crime scene has been identified by an expert to exhibit certain patterns or telltale clues consistent with previous sexual homicides triggered by "precipitating stressors", then it is more likely that this crime was similarly motivated.[537]

Justice Barker also stated that:

> Moreover, we find that the FBI's study revealing a seventy-five to eighty percent accuracy rate for crime scene analysis lacks sufficient trustworthiness to constitute evidence of this technique's reliability. Although the frequency with which a technique leads to accurate or erroneous results is certainly one important factor to determine reliability, equally important is the method for determining that rate of accuracy or error. In this case, there is no testimony regarding how the FBI determined the accuracy rate of this analysis. For example, was accuracy determined by confessions or convictions, or both? Even then, the absence of a confession does not indicate the offender's innocence and thus an inaccuracy in the technique. Clearly, the accuracy rate alone, without any explanation of the methodologies used in the study, is insufficient to serve as the foundation for the admission of this testimony.
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> Therefore, because the behavioral analysis portion of Mr. McCrary's testimony does not bear sufficient indicia of reliability to substantially assist the trier of fact, we conclude that this testimony was properly excluded.[538]

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[537] Id, at 835.

[538] Id, at 836.

The Supreme Court concluded that the defendant's arguments lacked merit and therefore affirmed the death sentence. The Court stated that the exclusion of the unreliable expert testimony by the trial court was not error.

In *State v. Fortin,*[539] linkage analysis, signature analysis and results of the FBI's ViCAP program were ruled inadmissible. Linkage analysis was also seen as an opinion on the ultimate issue. Steven Fortin was charged with capital murder, having killed the victim in the course of a gruesome sexual assault. The victim, Melissa Padilla, aged twenty five, was found sexually assaulted, robbed and strangled to death on August 11, 1994 in Avenel, Woodbridge Township, New Jersey.[540]

> Padilla's body was naked from the waist down. She was wearing a shirt, but no bra. Bags of food, a partially eaten sandwich, a store receipt, an earring, debris including cigarette butts, and a bloody one-dollar bill were found scattered near the body. Padilla's shorts, with her underwear still inside them, were found on a nearby shrub.
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> Inside the concrete pipe was a large blood stain. The assailant had brutally beaten Padilla about her face and head. Her face was swollen and bruised, and her nose was broken. She had been killed by manual strangulation. The autopsy revealed rectal tearing, and bite marks on Padilla's left breast, left nipple, and the left side of her chin.[541]

On April 3, 1995, a Maine State Trooper, Vicki Gardner, aged thirty four, was also sexually assaulted, beaten and strangled to unconsciousness. She survived. She was

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[539] *State v. Fortin, 162 N.J. 517, 745 A.2d 509 (2000).*

[540] *State v. Fortin, 318 N.J.Super. 577, 724 A.2d 818 (1999).*

[541] *State v. Fortin, 162 N.J. 517, 510, 745 A.2d 509 (2000).*

off duty on that day but was traveling in a marked police vehicle, when she saw a car parked on the shoulder of Highway 95 in the state of Maine. State Trooper Gardner stopped to check what was wrong. The defendant, Steven Fortin was inside the car. The defendant had a learner's permit issued in New Jersey. Trooper Gardner noticed that Fortin was under the influence of alcohol and gave him some sobriety tests. The tests showed that Fortin was under the influence of alcohol and Gardner placed him under arrest. She called her office and requested for an officer to come to assist her. It was reported that while she was waiting for back-up to arrive, she was attacked by Fortin. She was beaten, sexually assaulted and strangled into unconsciousness.[542] It was reported that Fortin "then placed Gardner in the passenger's seat of the police vehicle, and drove the police vehicle down the highway. Gardner regained consciousness and partially jumped, and was partially pushed by defendant, from the vehicle".[543] Fortin lost control of the vehicle. He fled but was later arrested at a nearby rest area.

> Gardner's face was badly battered, and she suffered a broken nose; bite marks to her chin, to her left breast nipple and on the outer left side of her left breast; and vaginal and anal tearing and lacerations. After defendant's attack, Gardner was naked from the waist down. Her pants were pulled off, with her underwear inside out. When interviewed later, defendant said Gardner pulled her own pants off while attempting to make sexual advances to him.[544]

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[542] *State v. Fortin, 318 N.J.Super. 577, 588, 724 A.2d 818 (1999).*

[543] Id.

[544] Id.

At the trial for this case in the State of Maine, Fortin pleaded guilty to seven counts of kidnapping, robbery, aggravated assault, assault on an officer, attempted gross sexual assault, unlawful sexual contact, and criminal operation of motor vehicle under the influence of alcohol.[545] He was sentenced to twenty years imprisonment.

The New Jersey police were not making any progress in the investigation into Padilla's death, until April 1995 when they were informed by the State of Maine Police Department that Steven Fortin had been arrested and charged in Maine for the sexual assault of Vicki Gardner. The Maine police contacted the New Jersey police to know if Fortin had any prior convictions, since his learner's permit showed that he lived in New Jersey. After analyzing the two cases, Lieutenant Lawrence Nagle who was involved with the investigation into Padilla's murder, felt that Fortin might have committed the two sexual assaults. He found several similarities between the two crimes. Further investigations also revealed that Fortin was indeed at the area where Padilla was killed on the day of the murder. This was confirmed by Dawn Archer, Fortin's girlfriend.[546]

At trial, the State therefore filed a motion to admit evidence from the Maine incidence to the present case in New Jersey, on the issue of identity. The State also informed the court of their intention to call a former FBI Agent Roy Hazelwood to testify as to the ritualistic and signature aspects of the crimes which will bolster their claim that the

[545] Id, at 589.
[546] Id, at 584.

two crimes were committed by the same person. The defense objected to both motions and argued that the testimony should not be allowed.

Agent Roy Hazelwood was called as an expert on *modus operandi* and ritualistic behavior. "He is a former FBI agent, has over thirty-two years experience as a law enforcement professional, a seventeen-year affiliation with the National Center for the Analysis of Violent Crime, and has consulted on more than 7,000 crimes of violence. He has published approximately thirty articles on topics of homicide, rape, serial rape, other types of sexual assault, and various other criminal or deviant sexual behavior, and has taught at various academies and at a few universities".[547]

A pre-trial hearing was conducted on the admissibility of the other-crime evidence and on the admissibility of the expert testimony. The Superior Court, Law Division, Middlesex County, New Jersey, ruled that the evidence that Fortin sexually assaulted a police officer in Maine was admissible as other-crime evidence. The court also ruled that Agent Hazelwood was qualified as an expert on ritualistic and signature aspects of crime and so his testimony was permitted. The trial court in granting the motion to introduce the other-crimes evidence, added that the defendant's guilty plea in the State of Maine should be excluded during the State's case-in-chief.[548]

In his testimony, Agent Hazelwood stated that he used "linkage analysis" and reviewed the two crimes and that the modus operandi of the crimes showed fifteen

[547] Id, at 590.

[548] Id, at 581.

similarities. That he was therefore, of the opinion that the two crimes were committed by one person. The fifteen similarities according to Hazelwood are as follows:

1. High-risk crimes;
2. Crimes committed impulsively;
3. Victims are female;
4. Age of victims generally the same;
5. Victims crossed the path of the offender;
6. Victims were alone;
7. Assaults occurred at confrontation point;
8. Adjacent to or on well-traveled highway;
9. Occurred during darkness;
10. No weapons involved in assaults;
11. Blunt-force injuries inflicted with fists, with nose of victims broken;
12. Trauma primarily to upper face, no teeth damaged;
13. Lower garments totally removed, with panties found inside the shorts or pants of the victims;
14. Shirt left on victims and breasts free; and
15. No seminal fluid found in/on victims.[549]

Agent Hazelwood also testified that the two crimes "were anger-motivated, and that the offender demonstrated anger through the following identified "ritualistic" or "signature" behavior in both crimes":

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[549] Id, at 591.

1. Bites to the lower chin;
2. Bites to the lateral left breast;
3. Injurious anal penetration;
4. Brutal facial beating; and
5. Manual frontal strangulation.[550]

It should be noted that the defense on the other hand, stated that there were sixteen differences between the two crimes. "There are differences in the age, race, weight and height of the victims. There is a significant difference in the status of each victim. Trooper Gardner is a professional police officer and a potentially dangerous target for someone to perpetrate a crime against, particularly when the defendant knew, prior to the assault, that his identity was made known to the state police dispatcher by Trooper Gardner. There are also differences in the type of assault. Trooper Gardner was anally and vaginally assaulted, while Padilla was assaulted anally, but not vaginally".[551]

Apart from Hazelwood, the State also called other witnesses. Lieutenant Lawrence Nagle of the New Jersey Police Department, one of the investigating officers also testified. "Nagle described the injuries to Padilla, stating she had trauma to the head, was beat about the face, was manually strangled, her pants were ripped down, there was rectal tearing and there were marks on her left breast area and on the left side of her chin that

[550] Id, at 592.

[551] Id, at 609.

appeared to be bite marks".[552] Dr. Marvin Schuster, who performed the autopsy, testified that the victim died as a result of "asphyxiation; assault and strangulation".[553] Two police officers from the Maine State Police also testified as to the events that happened in the sexual assault of Vicki Gardner, and the type of injuries that she sustained. Dr. Lowell J. Levine, a forensic odontologist also testified. He stated that his review and comparison of the autopsy reports, the bite marks on both victims, dental casts and Fortin's bite-mark samples, showed that the bite marks found on both victims came from the defendant's teeth. Dr. Levine concluded that "based upon the comparison revealing similarities among the bite marks, it is my opinion that the bite marks on both women could have been caused by Steven Fortin".[554]

It should also be noted that DNA samples recovered from Padilla's body, a cigarette butt found at the crime scene, fingernail clippings, a dollar bill with blood stain, and blood samples from the victim and the defendant were analyzed. Some of the results were inconclusive and some could not exclude the defendant as being the source of the DNA.[555] The court ruled that the other-crime evidence and Hazelwood's testimony were admissible.

The defendant appealed and argued that:

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[552] Id, at 584.

[553] Id, at 586.

[554] Id, at 590.

[555] Id, at 587.

1. The State should not be allowed to introduce inflammatory and severely prejudicial evidence of allegedly similar crime under the provisions of the N.J.R.E 404(b) to substitute for its "paucity" of evidence.
2. The admission of evidence regarding the incident in the state of Maine would be contrary to the established case law because the State failed to meet its burden to prove the two crimes were sufficiently identical and because the prejudicial value grossly outweighs the limited probative value.
3. The proffered testimony of Robert Hazelwood does not meet the standard of admissibility for expert testimony as set forth by the New Jersey Supreme Court and the trial court's ruling was therefore erroneous.[556]

In its ruling, the Superior Court, Appellate Division, affirmed the trial judge's decision that the other-crime evidence can be admitted on the issue of identity. Delivering the opinion of the appellate division, Justice Fall stated that "given our standard of review, we are satisfied the trial judge's decision was not "so wide off the mark that manifest denial of justice resulted," or that his ruling constitutes an abuse of discretion. ... The judge carefully applied the four prong test outlined in *Codfield* in determining whether the proffered other-crime evidence was admissible".[557] Justice Fall further stated that "the potential for prejudice by admission of the other-crime evidence in this crime is great. Therefore, while we are in accord with the judge's ruling in permitting its admission, at trial the judge must "sanitize" the other-crime evidence by confining its

[556] Id, at 582.

[557] Id, at 597.

admissibility to those facts reasonably necessary for the probative purpose of "identity". To an extent, the judge ruling inadmissible defendant's guilty plea in Maine, goes to this effort of minimizing the prejudicial effect".[558]

The appellate division however, ruled that Hazelwood's testimony using linkage analysis is not sufficiently reliable to be admissible as expert evidence.[559] Justice Fall said:

> Here, as the judge noted, Hazelwood testified "this analysis is not based on science, but based on his training and experience with violent crime". While not based on science in the technical sense, his linkage analysis methodology is certainly founded in the area of behavioral science, in that it analyzes the conduct of the crime perpetrator in two or more crimes to determine whether there is sufficient consistency of behavior to conclude that one person committed both crimes.
> We conclude that the same detailed analysis regarding admission of scientific evidence is applicable and necessary in determining whether linkage analysis expert testimony is admissible. Theories or methods of explaining human conduct and behavior have consistently been subject to significant scrutiny and analysis by our courts when admission is sought.[560]

It should also be pointed out that Hazelwood in his testimony stated that *modus operandi* and ritualistic behavior analysis was accepted by the law enforcement community. On that issue, Justice Fall stated that "we have no doubt that these methods are valid and have great value in performing the very difficult task of criminal investigation. We are not persuaded, however, that these techniques are sufficiently reliable for an expert in those fields to testify that the same person who committed one crime committed the other

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[558] Id, at 598.

[559] Id, at 600.

[560] Id.

under the analysis of the facts and circumstances presented in this case".[561] Justice Fall further stated that:

> Our examination of the authorities and literature authored by Hazelwood convinces us that a linkage analysis as a foundation for the expert behavior identification testimony proffered in this case is wholly inappropriate. In the recent book The Evil that Men Do, Stephen G. Michaud with Roy Hazelwood (1988), there is significant discussion concerning the application of linkage analysis in the identification of serial offenders. ... Hazelwood defines therein a serial offender as one who has committed three or more offenses. Additionally, as described in this book, the use of linkage analysis leading to identification of the perpetrator also involves an evaluation of the personal history and background of the suspected perpetrator, to develop a profile.[562]

The Appellate Division therefore, held that "we are simply not convinced that the State has satisfied its burden to establish that "the field testified to is at a state of art such that an expert's testimony could be sufficiently reliable".[563] The Appellate Division also saw the testimony as an opinion on the ultimate issue. "Further, given the conclusive nature of Hazelwood's testimony, we find there is no acceptable limiting instruction that could be given to the jury to avoid the prohibition against an expert expressing his opinion in such a way as to emphasize that the expert believes the defendant is guilty of the crime charged under the statute".[564]

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[561] Id, at 609.

[562] Id.

[563] Id, at 610.

[564] Id.

"In summary, we affirm the decision permitting the introduction of other-crime evidence, after it is properly sanitized, and reverse the order permitting Hazelwood to give expert testimony that the same person who committed the Maine crime also committed the New Jersey crime".[565]

The case reached the Supreme Court of New Jersey, on appeal and cross-appeal. On one hand, the defendant sought a review of the appellate division's ruling that the other-crime evidence was admissible. The State on the other hand, prayed the Court to review the appellate division's ruling that Hazelwood's testimony was inadmissible. In its ruling, the Supreme Court of New Jersey held that "for the reasons stated in its opinion, we agree with the judgment of the Appellate Division that the proposed expert testimony of Hazelwood concerning linkage analysis lacks sufficient scientific reliability to establish that the same perpetrator committed the Maine and New Jersey crimes".[566] Delivering the opinion of the Supreme Court, Justice O'Hern added that linkage analysis is similar to the rapist profile evidence which is inadmissible. That Hazelwood's testimony failed to "meet the standards for the admission of testimony that relates to scientific knowledge. Although Hazelwood possess sufficient expertise in his field and his intended testimony is beyond the ken of the average juror, the field of linkage analysis is not at a "state of the art" such that his testimony could be sufficiently reliable".[567] Justice O'Hern went on to say that "as the Appellate Division noted however, the authorities and literature authored

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[565] Id.
[566] *State v. Fortin, 162 N.J. 517, 525, 745 A.2d 509 (2000).*

[567] Id, at 526.

by Hazelwood and others do not demonstrate that linkage analysis has attained such a state of art as to have the scientific reliability of DNA testing".[568]

> Moreover, linkage analysis is a field in which only Hazelwood and a few of his close associates are involved. Concerning consensus on acceptance of "linkage analysis" in the scientific community, the other experts mentioned by Hazelwood in his testimony were either current or former co-workers. In this respect, there are no peers to test his theories and no way in which to duplicate his results.[569]

Summing up Hazelwood's linkage analysis, Justice O'Hern stated that if "stripped of its scientific mantra, the testimony is nothing more than a description of the physical circumstances present".[570] Justice O'Hern ruled that Hazelwood would have to prove the reliability of linkage analysis by producing a reliable database from which it was based. The Supreme Court affirmed the Appellate Division's judgment and remanded the matter to the Law Division for further proceedings. At the Superior Court, Law Division, Middlesex County, Fortin was convicted of capital murder, aggravated sexual assault, first-degree robbery, and felony murder. He was sentenced to death and he appealed.

The State filed a motion for clarification of certain aspects of the judgment.[571] The Supreme Court of New Jersey held that:

1. trial court improperly limited *voir dire* by rejecting inquiry concerning evidence of the defendant's sexual assault of law enforcement officer in another state;

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[568] Id, at 527.

[569] Id.

[570] Id, at 533.

[571] *State v. Fortin, 178 N.J. 540, 843 A.2d 974 (2004).*

2. State's expert should not have been permitted to testify on violent sexual crimes without producing a reliable database of violent sexual assault cases that he had investigated, studied or analyzed;
3. defendant could waive protection of Ex Post Clause in order to obtain instruction on life in prison without parole, if jury rejected death sentence;
4. convictions for manslaughter several years earlier and sexual assault approximately eight months after murder were relevant and admissible at penalty phase; and
5. aggravating factors are elements of capital murder and thus, must be submitted to a grand jury and returned in an indictment; overruling *State v. Martini*, 131 N.J. 176, 619 A.2d 1208.[572]

The Supreme Court of New Jersey reversed the judgment of conviction and remanded for a new trial.

At the retrial,[573] the State presented several witnesses at the pretrial hearing. Dr. Geetha Natarajan (the medical examiner who carried out the autopsy on Padilla), testified that in more than twenty-five years that she had conducted autopsies that she could not remember any other case in which the autopsy revealed bite marks on the chin of the other victims.[574] Dr. Lawrence Ricci (an expert in emergency medicine and pediatrics)

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[572] Id.

[573] *State v. Fortin, 189 N.J. 579; 917 A.2d 746; (2007).*

[574] Id, at 589.

also "testified that both Padilla and Gardner suffered traumatic anal injuries, but could not say that those injuries were any more distinctive than similar injuries inflicted on other sexual assault victims".[575] Dr. Lowell Levine (an odontologist) also testified that in more than thirty years that he had been in the field that "he had never seen the combination of bite marks on the chin, the left nipple, and the left breast that appeared on both Gardner's and Padilla's bodies".[576] He said that he compared the bite marks on the two victims with Fortin's dental casts/impressions and was of the opinion that there was a high degree of probability that the bite mark on Padilla's left breast was caused by the defendant's teeth.[577]The State also called Mark Safarik (FBI Supervisory Agent), who testified that the results of a search of the FBI's ViCAP database showed a match between the Gardner and Padilla assaults as signature-crime. Hence, he was of the opinion that Fortin committed both crimes. It should be noted that the State decided not to call Agent Hazelwood to testify again. They called Mark Safarik instead.

> In his testimony, FBI Supervisory Special Agent Mark Safarik described the Violent Criminal Apprehension Program, more commonly known as ViCAP. Created in 1984, ViCAP is a national database of approximately 167,000 reported violent crimes (homicides, attempted homicides, and kidnappings) maintained by the FBI in Quantico, Virginia. The database represents about three to seven percent of the violent crimes committed since ViCAP's inception. Participation in ViCAP nationwide is voluntary. Law enforcement agencies that complete the ViCAP form answer numerous questions about the crime for inclusion in the national database.
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> The general purpose of ViCAP "is to identity similarities in crimes" through a computer search isolating particular

[575] Id.

[576] Id.

[577] Id.

> characteristics in the commission of the offense. Through such a computer search focusing on specific crime criteria, one law enforcement agency can contact and cooperate with another agency working on a "similar case with similar characteristics." According to Agent Safarik, the "ViCAP system is looking for ... solved or unsolved homicides, or attempted homicides, missing persons cases, kidnappings, where there is a strong possibility of foul play, or unidentified dead bodies, where the manner of death is suspected to be homicide.[578]

There was a problem with the admission of Safarik's testimony.

> Law enforcement authorities completed the ViCAP form for the Padilla murder in a timely manner for inclusion in the national database. The Maine State Police, however did not complete a ViCAP form for the 1995 Gardner sexual assault. In 2004, in preparation for the defendant's trial, the State requested that Agent Safarik submit a ViCAP form for the Gardner case. He did so with the assistance of a ViCAP analyst and the Maine State Police. Agent Safarik then ran a series of searches on the ViCAP for specific criteria common to both the Padilla and Gardner crimes, such as manual strangulation, sexual assault, and bite marks on the face and chest. The searches yielded only three cases – the Padilla murder, the Gardner sexual assault, and a 1988 case from Washington State. The State argued that the searches showed that the similarities between the Padilla and Gardner crimes were so unusual as to constitute a signature. Significantly, Agent Safarik indicated that the ViCAP database could not be released to defense counsel because of privacy concerns and that it was exempt from the Freedom of Information Act.[579]

On the other hand, the defense offered two expert witnesses. First, Dr. Norman D. Sperber (the Chief Forensic Dentist in the San Diego Medical Examiner's Office), stated that there are doubts as to whether the marks on Padilla's breast and chin were indeed

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[578] Id.
[579] Id, at 590.

bite marks.[580] Dr. Sperber further stated that "even assuming the injuries to the breast and chin were bite marks, that they were not caused by defendant's teeth".[581] It should be noted that Dr. Sperber testified in the original trial and all parties agreed that the testimony should be used in this retrial hearing.

The defense also presented Dr. Grover Godwin, as an expert in statistical evaluation of crime scenes. Dr. Godwin stated that the reliability of the ViCAP database was questionable because of what he described as "a bias in entering the variables".[582]

The motion judge ruled that only the evidence on the bite marks which suggested uniqueness, would be allowed. That the other injuries would not be allowed because they were common to sexual crimes, and that these other injuries would be unduly prejudicial to the defendant.

> The motion judge also maintained that the ViCAP database might have applicability at trial. For instance, "absent the insertion of the Maine crime, she found that the ViCAP database would be a reliable database upon which the State may rely to test the expert opinions." With regard to the Gardner ViCAP form, she observed that it was prepared for litigation purpose and therefore "failed to provide an unbiased generation of data." Alternatively, she suggested that "if the ViCAP database could be crafted to report on the uniqueness of the human bite mark criteria alone, "the database would then be useful in proving "a signature-like crime. To be useful, for example, the ViCAP analysis would have "to determine how many, if any, cases involve bite marks on the chin." The judge noted, however, that the

[580] Id, at 591.

[581] Id.

[582] Id.

> ViCAP forms do not contain a box for bite marks to the chin.[583]

The State filed a motion appealing the motion judge's decision, but it was denied by the Appellate Division. The State therefore, filed an interlocutory appeal at the Supreme Court of New Jersey. The State argued that there were three errors in the motion judge's ruling.

1. The motion judge conditioned the introduction of the signature-crime evidence on expert testimony explaining the uniqueness of the bite marks in the Padilla and Gardner cases;
2. The motion judge would not admit evidence of the injuries sustained by Gardner other than the bite marks, thereby denying the jury the necessary context in which to determine whether the two crimes are indeed signature crimes;
3. The motion judge would not allow the ViCAP database to be used to show that a computer search revealed only three cases with the pattern of bite marks to the breast and chin – the Padilla and Gardner cases, and a Washington State case.[584]

In their ruling, the Supreme Court of New Jersey said: "We did not consider in *Fortin I* whether, absent expert testimony, the Gardner-other-crime evidence would be admissible to establish that the Padilla murder was the distinctive handiwork of defendant. We now hold that the comparative analysis necessary to determine whether the Padilla murder and

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[583] Id, at 754.

[584] Id, at 593.

Gardner sexual assault are signature crimes is outside of the ordinary experience and knowledge of jurors and requires the assistance of expert testimony".[585]

Delivering the opinion of the Supreme Court, Justice Albin stated that the motion judge did not err by conditioning the signature-crime evidence on the presentation of expert testimony.[586] Justice Albin further stated that the motion judge did not abuse her discretion by asking the State to provide the defense with the database of cases from which Dr. Levine and Dr. Natarajan based their opinion. Additionally, Justice Albin stated that "our evidentiary rules provide trial courts with the authority to require pretrial disclosure of "the underlying facts or data" that supports an expert's opinion".[587] Justice Albin also stated that "significantly, although the State presented Agent Safarik to explain the functions of ViCAP, neither he nor any other expert witness vouched that a ViCAP crime match, such as the one in this case, constituted reliable signature-crime evidence".[588] Justice Albin said:

> We share the judge's concern that only relevant evidence should bear on the issues that must be decided by the jury. We disagree, however, that details of the Gardner assault can be so finely parsed. Although the other injuries suffered by Gardner do not fall into the category of signature evidence, the bite marks were inflicted during a vicious sexual assault. That reality cannot be ignored or withheld from the jury without seriously distorting the import of the bite-mark evidence. By its very nature, signature-crime evidence carries the potential for prejudice. Nevertheless, signature-crime evidence may be highly probative, and in this case, we conclude that its

[585] Id.

[586] Id, at 597.

[587] Id, at 598.

[588] Id, at 603.

> probative value is not outweighed by its prejudicial effect. ... Therefore, we will allow the State to present the bitemark evidence within the general narrative of the sexual assault on Trooper Gardner.[589]

It was held that "placing the bite-mark evidence in context will permit the jury to better fulfill its truth-seeking function. That approach benefits defendant as much as the State. Sanitizing the Gardner assault would keep from the jury the many differences between the two crimes that might lead it to reject the signature-crime evidence".[590] Therefore, Justice Albin stated that allowing all the material details from the Gardner assault was fair.

The Supreme Court of New Jersey affirmed the motion judge's ruling with modifications. Justice Albin stated that "the State must be permitted to present the bite-mark evidence in context and therefore material details of the Gardner sexual assault cannot be censored. Testimony describing that assault, however, is subject to specific jury instructions explaining the limited use of "other-crimes" evidence under N.J.R.E. 404(b). Finally, because the State's experts have not relied on the ViCAP database to form their opinions, the ViCAP database should not be admissible to bolster those opinions".[591]

Justice Albin acknowledged the fact that ViCAP is a very useful tool of crime investigation but stated that "ultimately, in conducting a fair trial, courts must ensure that

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[589] Id, at 599.

[590] Id, at 600.

[591] Id, at 585.

only reliable evidence is submitted to our juries consistent with our evidentiary rules. As presented, ViCAP does not meet the standards for admissibility of evidence".[592]

The Supreme Court of New Jersey therefore, remanded the case for further proceedings.

As we can see from this case, offender profiling evidence, no matter which label it has been dressed up in, still need to be based upon reliable facts or data. In this case, we have seen the terms linkage analysis, ritualistic behavior, signature-crime analysis, and ViCAP program all being used to show one thing – that bite marks on two victims came from one individual. This case clearly supports my argument that some profilers have the tendency to dress up their testimony in different labels so that it will be admitted. Offender profiling and its derivatives or its other labels should not be admitted as evidence until its foundation can be properly and objectively ascertained. The foundations must be proved by reliable facts and data.

At this point, it should be noted that a few studies have been carried out on the accuracy of profilers. In 1990, for instance, Pinnizzotto and Finkel carried out a study in United States.[593] The study was made up of five groups – (1) four profilers from the FBI, (expert/teachers) (2) six police detectives who had been trained by the FBI profilers, (3) six experienced police homicide and sex detectives, with no training in criminal personality profiling, (4) six clinical psychologists, who according to

[592] Id, at 606.
[593] Anthony J. Pinizzotto., and Norman J. Finkel, "Criminal Profiling: An Outcome and Process Study", Law and Human Behavior, vol. 14, No. 3, (1990), 215 – 233.

Pinizzotto and Finkel were "naïve to both criminal profiling and criminal investigations,"[594] and (5) six undergraduate psychology students.

The five groups were given two real and solved cases - one sex offense case and one homicide case. Pinizzotto and Finkel noted that this study was based on the rationale that, "given the growing use of the personality profile and the fact that this growing use is largely supported by testimonials and accuracy figures that were not obtained through controlled studies, this research was undertaken to provide more precise answers to both *outcome* and *process* questions."[595] The materials given to the participants for this study, in the homicide case, included crime scene reports, crime scene photographs, autopsy and toxicology reports, as well as the victim report.[596] For the sexual offense case, the participants also received victim statement, police reports and victim reports.[597]

This study, even though it was based on a very small sample, generated interesting and controversial results. First, the study found out that "for both the homicide and the sex offense cases, the profiles written by the professional profilers were indeed richer than the nonprofiler groups of detectives, psychologists, and students."[598] The result also showed that "an analysis of the specific questions for each case shows that

[594] Id, at 219.

[595] Id, at 217.

[596] Id, at 219.

[597] Id.

[598] Id, at 222.

profilers achieved higher group scores for the sex offense case in questions dealing with the age of the offender, the education of the offender, age, and condition of the offender's automobile, and the victim-offender relationship."[599]

Interestingly, the results also showed that "the profilers did not achieve higher scores than subjects in the other groups in these same categories for the homicide case."[600] In the homicide case, "profilers, however, do not appear to process this material in a way qualitatively different from any other group."[601]

In the lineup rankings, the study also showed that "in the sex offense case, the expert/teachers were accurate in picking out the offender 100% of the time, and the profilers were accurate 83% of the time. As for the other groups, accuracy is lower, and declines as we move from detectives (67%) to psychologists (50%) to students (16%)."[602]

Based on the results of this study, Pinizzotto and Finkel concluded that; "Concerning the outcome issue, professional profilers are more accurate (i.e., more correct answers, higher-accuracy scores, more correct lineup identifications) for the sex offense case than nonprofilers, but these accuracy differences disipate when we look at the homicide case. There were, however, significant outcome differences between

[599] Id, at 223.

[600] Id, at 224.

[601] Id, at 215.

[602] Id, at 224.

profiler and nonprofiler groups for the homicide case in all the analyses of the written profile."[603]

It should be noted that the authors did acknowledge certain limitations of this study. On the small sample, the authors noted that they "were unable to locate sufficient numbers of expert/teachers who were both actively engaged in profiling and willing to cooperate in this study."[604] This goes a long way in highlighting my argument that there is a need for closer cooperation among the different segments involved in offender profiling. It is noteworthy to point out that Pinizzotto after this study, joined the FBI.

Finally, Pinizzotto and Finkel also noted that "while the overall outcome superiority of the profilers is most likely indicative of greater expertise, it must be kept in mind that an "investment" factor could also be invoked to explain these results. Psychologists and students may see this task as an interesting exercise, whereas profilers, and detectives, perhaps, see it as the "blood and guts" of their professions, and therefore generate lengthier profiles and spend more time on the task."[605]

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[603] Id, at 227.

[604] Id, at 218.

[605] Id, at 227.

This study undoubtedly has been criticized. Kocsis et al argued that "only 15 items of offender information were processed by Pinizzotto and Finkel, and there was no scrutiny of the types of information on which profilers were more accurate."[606]

Risinger and Loop were also highly critical of this study. They maintained that "Pinizzotto and Finkel reanalyzed the results giving half credit for some of the inaccurate multiple choice answers based on the judgment of the "expert" profiler subgroup that some wrong answers were less wrong than others; however, they never set out the results of that reanalysis, simply asserting that for both cases the only significant differences that emerged were an advantage of the profiler group compared to the student group."[607] Risinger and Loop further argued that the authors only set out the number of accurate predictions without adding the number of inaccurate predictions.[608] As such Risinger and Loop concluded that "the profilers got one-third of the questions wrong even in the rape case, and two-thirds wrong in the homicide case."[609]

It should be noted also that in 1995, FBI profilers came up with what they called the key attributes of successful profilers. In their work, Hazelwood et al maintained that

[606] Richard N. Kocsis., Harvey J. Irwin., Andrew F. Hayes., and Ronald Nunn, "Expertise in Psychological Profiling: A Comparative Assessment", Journal of Interpersonal Violence, vol. 15, No. 3, 314 (2000).

[607] See footnote 320, in Michael D. Rissinger., and Jeffrey L. Loop, "Three Card Monte, Monty Hall, Modus Operandi and "Offender Profiling": Some Lessons of Modern Cognitive Science for the Law of Evidence", 24 Cardozo L. Rev. 193, 320 (Nov. 2002).

[608] See footnote 322, in Michael D. Risinger., and Jeffrey L. Loop, "Three Card Monte, Monty Hall, Modus Operandi and "Offender Profiling": Some Lessons of Modern Cognitive Science for the Law of Evidence", 24 Cardozo L. Rev. 193, 320 (Nov. 2002).

[609] Risinger and Loop, supra note 34, at 249.

the main attributes for successful profilers are knowledge of the criminal mind, investigative experience, objectivity, logical reasoning/critical thinking and a high level of intuition.[610]

In 2000, Kocsis et al replicated the study by Pinizzotto and Finkel. This study involved four groups:

(1) Five profilers. These profilers were those who had given some form of psychological profiling advice to a law enforcement agency.

(2) Thirty-five active police officers.

(3) Thirty Australian psychologists with no prior study of forensic or criminal psychology.

(4) Thirty-one Australian science and economics university undergraduates.

(5) Twenty Australian psychics. These are those psychics who believed that their paranormal abilities could be useful in constructing an offender profile.[611]

Kocsis et al chose these groups because they are believed to possess the key attributes outlined by Hazelwood et al. Thus, the psychologists were chosen for appreciation of criminal mind, police officers for their investigative experience, university students for objectivity and logical reasoning and psychics for intuition. Kocsis et al stated that this study was aimed at investigating the "skills underlying the effective performance of

[610] Hazelwood, R.R., Ressler, R.K, Duppue, R.L., and Douglas, J.C., "Criminal Investigative Analysis: An Overview", in R.R. Hazelwood and A.W. Burgess, (eds) Practical Aspects of Rape Investigation: A Multidiciplinary Approach, 2nd ed. (1995).
[611] Kocsis, Irwin, Hayes, and Nunn, supra note 606, at 316.

criminal psychological profiling."[612] In order to achieve this, the study groups were presented with a solved murder case. In this study, the performance of the groups were compared in the profiling task.

In the five-part survey inventory, the groups were given detailed information about this solved murder case. They were presented with several materials including the crime scene report, crime scene photographs, photos of the victim's body, a forensic biologist's report, a forensic entomologist's report, a ballistics report, autopsy reports, and basic background information of the victim.[613] In this study, the participants were asked questions about the physical characteristics, cognitive processes, offense behaviors and social history and habits of the offender.[614]

The results of the study showed that the "five groups did differ in their total accuracy but only marginally."[615] In order to specifically answer the question of whether profilers were more accurate than nonprofilers, Kocsis et al decided to collapse the psychologists, police officers, students and psychics into one group (nonprofiliers) and then compared their performance with that of the profilers. The result showed that "on every measure of accuracy, the profilers answered more questions correctly than the nonprofilers.

[612] Id, at 311.

[613] Id, at 317.

[614] Id, at 319.

[615] Id, at 320.

Furthermore, this difference was statistically significant on the total accuracy measure."[616]

The results of this study also showed that "in spite of their training, knowledge, and experience, profilers did no better than anyone else in the correct identification of features of the offender or offense."[617] It should be noted however, that "the profilers did descriptively outperform all other groups on the two omnibus measures of accuracy and on two of the submeasures (cognitive processes and social status and behavior). On the other two submeasures, the profilers were the second most accurate group with the difference between them and the most accurate group (psychologists) negligible and easily attributable to sampling error."[618]

The results also showed that "in comparison to the police and perhaps the psychics, the group of psychologists showed superior performance on several components of the task. The study's findings therefore might be taken to suggest that specifically psychological knowledge is more pertinent to successful profiling than are investigative experience and intuition."[619]

The authors noted however, that:

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[616] Id.

[617] Id, at 321.

[618] Id.

[619] Id, at 325.

> In any event, the study does encourage the view that an educated insight into human behavior could play an important role in the process of psychological profiling. At the same time, it must be stressed that the psychologists' performance did not differ significantly from that of the student group, so it remains uncertain whether the psychologists' advantage over some other groups was predominately in regard to specific knowledge of the behavioral science or to a broader capacity for objective and logical analysis.[620]

The result also showed that the police officers did not perform well in the profiling task. Kocsis et al therefore, disagreed with the earlier work by the FBI profilers which stated that investigative experience is a key attribute of successful profilers. The study also showed that "the accuracy of the psychics was not high and indeed, unlike all other groups used in the project, these participants showed no insight into the nature of the offender beyond what reasonably could be gleaned from the prevailing social stereotype of a murderer. Notwithstanding anecdotal reports of the successful use of psychics in police investigations, this study certainly does not serve to encourage reliance on psychics by police services."[621]

Kocsis et al noted the problem with the small sample of profilers in their study (only five), which they correctly noted "not only impeded the chances of statistical significance but also raised substantial doubts about this groups' representativeness of profilers as a

[620] Id.

[621] Id.

whole."[622] It should be noted that Kocsis et al invited more than forty profilers in several countries to participate in this study but only five agreed.

This study has been criticized extensively. It has been argued that the data was a mere reflection of the differences in intelligence across the groups.[623]

Kocsis et al carried out other studies in their effort to provide an empirical foundation for the key skills and abilities necessary for successful profiling. In 2002, Kocsis et al carried out another study involving senior detectives, homicide detectives, trainee detectives, police recruits and university students. This study also involved details of a solved murder case. The results of the study showed that the university students performed better than other groups on all the submeasures except on cognitive processes and offense behaviors.[624] The result also showed that groups with post-secondary education outperformed those without post-secondary education. Kocsis et al therefore concluded that based on this study, investigative experience is not a key attribute of effective profiling.

In 2003, Kocsis carried out another study involving nine groups – profilers, psychologists, undergraduate students, specialist detectives, general police officers,

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[622] Id, at 327.

[623] Richard N. Kocsis., Harvey J. Irwin., Andrew F. Hayes., and Ronald Nunn, "Expertise in Psychological Profiling: A Comparative Assessment", Journal of Interpersonal Violence, vol. 15, No. 3, (2000), at 326, citing an anonymous referee.

[624] Kocsis R.N., Hayes, A.F., and Irwin H. J. , "Investigative Experience and Accuracy in Psychological Profiling of a Violent Crime." Journal of Interpersonal Violence, 17 (2002) 811 – 823.

police recruits, non-police specialists and psychics.[625] In this study, the profilers scored highest, followed by undergraduate students and psychologists. Kocsis concluded that logical reasoning ability and appreciation of criminal mind are the key attributes.

In 2004, and using arson cases, Kocsis carried out another study involving detectives (specialists in arson), arson investigators from the fire service, professional profilers, and undergraduate university students.[626] There was a control group of community college students. The results of the study showed that profilers were more accurate than detectives, followed by undergraduate students, arson investigators, the control group and police detectives. Based on the results of this study, Kocsis again concluded that logical reasoning ability was the key attribute for effective profiling.

Many scholars have criticized the studies by Kocsis. Bennell et al, for instance, argued that Kocsis did not provide an operational definition of logical reasoning/critical thinking and also failed to "assess whether or not the skills that are supposedly being examined are actually possessed by their participants."[627] Further studies are still needed.

In this chapter, we have examined the central admissibility problems with offender profiling testimony in United States. We have noted the different areas of attacking

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[625] Richard N. Kocsis, "Criminal Psychological Profiling: Validities and Abilities', International Journal of Offender Therapy and Comparative Criminology, 47 (2003) 126 – 144.

[626] Richard N. Kocsis, "Psychological Profiling of Serial Arson Offenses: An Assessment of Skills and Accuracy', Criminal Justice and Behavior, 31 (1004) 341 – 361.

[627] Craig Bennell., Shevaun Corey., Alyssa Taylor., and John Ecker, "What Skills are required for Effective Offender Profiling? An Examination of the Relationship between Critical Thinking Ability and Profile Accuracy", Paper presented at the 35th annual conference of the Society for Police and Criminal Psychology, Washington/Chevy Chase Maryland, October 26, 2006.

offender profiling evidence and answered such questions as:- is offender profiling impermissible character evidence? Who is qualified to give expert offender profiling evidence? Is offender profiling too prejudicial than probative? Is offender profiling an opinion on the ultimate issue? Is offender profiling sufficiently reliable as to be admissible? It has also been noted that in some cases, offender profiling is an improper subject for expert testimony. This chapter has also highlighted the impact of the three rules of admissibility on offender profiling. The Federal Rule of Evidence being loose and too liberal has created problems for trial judges in making decisions on offender profiling cases. Under the Rule, almost anybody can qualify as an expert, and can give testimony either on a scientific, technical or other specialized field of knowledge. Under a stringent application of *Frye*, it has to be shown that offender profiling has achieved widespread acceptance by the relevant community. A strict application of *Daubert* requires offender profiling evidence to satisfy the four factors, especially the requirement that the technique must be based on a reliable data or foundation. In the next chapter, we examine offender profiling in other countries.

Chapter Five

Offender Profiling in Comparative Perspective

England

The previous chapter has shown that United States courts are inconsistent in their decisions on cases involving offender profiling. In England on the other hand, offender profiling evidence is generally seen as inadmissible at the moment. Several reasons account for this, but first we examine the rules governing the admissibility of expert testimony in England. In general terms, the English law of evidence provides that all relevant evidence is admissible so long as it is not excluded by other laws of evidence, such as the hearsay rule, opinion on character evidence rule, as well as conduct on other occasions rule.

In England, the main rule governing the admission of expert evidence was arguably laid down in the case of *Folkes v. Chadd,*[628] where it was held that:

> The opinion of scientific men upon proven facts may be given by men of science within their own science. An expert's opinion is admissible to furnish the court with scientific information which is likely to be outside the experience and knowledge of a judge or jury. If on the proven facts a judge or jury can form their own conclusions without help, then the opinion of an expert is unnecessary. In such a case if it is given dressed up in scientific jargon it makes judgment more difficult. The fact that an expert witness has impressive scientific qualifications does not by

[628] *Folkes v. Chadd, (1782) 3 Doug KB 157.*

> that fact alone make his opinion on matters of human nature and behaviour within the limits of normality any more helpful than that of the jurors themselves; but there is a danger that they may think it does.[629]

In this case, the issue was whether the embankment erected by the plaintiff for the purpose of preventing the overflowing of Wells Harbour caused the decay/silting up of the harbour, by stopping the back water. The embankment was erected in 1758 and the harbour started to choke/fill up soon after that. The case was tried three times before it reached the Court of Appeal. First, at the last Lent Assizes for the County of Norfolk, Mr. Milne, an engineer was called by the plaintiffs, and he testified that in his opinion that the embankment was not the cause of the decay. The plaintiffs also proffered evidence that showed that "other harbours on the same coast, similarly situated, where there were no embankments, had begun to fill up and to be choked about the same time as Wells Harbour."[630] At the trial presided over by Mr. Justice Ashurst, the jury ruled in the defendant's favor.

At the Court of Chancery, the plaintiffs called another expert, Mr. John Smeaton, a civil engineer. He stated that in his opinion the bank did not cause the choking and filling up of the harbor. He also stated that removing the embankment would not solve the problem. An objection was raised. It was argued that "the inquiring into the site of other harbour was introducing a multiplicity of facts which the parties were not prepared to meet."[631]

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[629] Id.

[630] Id.

[631] Id, at 159.

"It was also objected that the evidence of Mr. Smeaton was a matter of opinion, which could be no foundation for the verdict of the jury, which was to be built entirely on facts, and not on opinions."[632] The testimony was admitted. The Court of Chancery ruled in the plaintiffs' favor and the defendants asked for a new trial. At the lower court, Chief Justice Gould rejected Smeaton's evidence and stated that the evidence was mere opinion, based on speculation and not based on direct observation.

On appeal, Lord Mansfield permitted the evidence and stated that "this is a matter of opinion, the whole case is a question of opinion, from facts agreed upon".[633] Delivering the judgment, Lord Mansfield noted that; "On the first trial, the evidence of Mr. Milne, who has constructed harbours, and observed the effects of different causes operating upon them, was received; and it never entered into the head of any man at the Bar that it was improper; nor did the Chief Baron, who tried the cause, think so. On the motion for the new trial, the receiving Mr. Milne's evidence was not objected to as improper; but it was moved for on the ground of that evidence being a surprise; and the ground was material, for, in matters of science, the reasonings of men of science can only be answered by men of science"[634].

In reversing the lower court's decision, Lord Mansfield said:

> It is objected that Mr. Smeaton is going to speak, not as to facts, but as to opinion. That opinion, however, is deduced from facts which are not disputed – the situation of banks, the

[632] Id.

[633] Id.

[634] Id.

> course of tides and of winds, and the shifting of sands. His opinion, deduced from all these facts, is, that, mathematically speaking, the bank may contribute to the mischief, but not sensibly. Mr. Smeaton understands the construction of harbours, the causes of their destruction, and how remedied. In matters of science no other witnesses can be called. An instance frequently occurs in actions for unskillfully navigating ships. The question then depends on the evidence of those who understand such matters; and when such questions come before me, I always send for some of the brethren of the Trinity House. I cannot believe that where the question is, whether a defect arises from a natural or an artificial cause, the opinions of men of science are not to be received. Hand-writing is proved every day by opinion; and for false evidence on such questions a man may be indicted for perjury. Many nice questions may arise as to forgery, and as to the impressions of seals; whether the impression was made from the seal itself, or from an impression wax. In such cases I cannot say that the opinion of seal-makers is not to be taken. I have myself received the opinion of Mr. Smeaton respecting mills, as a matter of science. The cause of the decay of the harbour is also a matter of science, and still more so, whether the removal of the bank can be beneficial. Of this, such men as Mr. Smeaton alone can judge. Therefore we are of the opinion that his judgment, formed on facts, was very proper evidence.[635]

The above decision in *Folkes v. Chadd*, was later supported by Justice Lawton in *R v. Turner.*[636] This decision in *Turner*, also known as the *Turner Rule*, established the boundaries as to the admissibility of expert evidence in England. Under the *Turner* rule, expert evidence is inadmissible unless it provides the courts with such information that is outside the common experience and knowledge of the judge or jury. *Turner* also states that expert evidence must be based upon facts which can themselves be proved by admissible evidence.

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[635] Id.

[636] *R v. Turner, (1975) Q.B. 834 (C.A).*

In *Turner*, the defendant, Terence Stuart Turner, was charged with the murder of his girlfriend, Wendy Butterfield, by hitting her with a hammer fifteen times. The defendant claimed that he was provoked by the victim's statement that while he was in prison that she had slept with two other men and that the child she was expecting was not his. After killing her, the defendant called the police, admitted the killing and his defence was provocation.[637]

At the trial, the defendant sought to call a psychiatrist, Dr. Smith, who would give evidence that he was not "suffering from a mental illness, that he was not violent by nature but that his personality was such that he could have been provoked in the circumstances and that he was likely to be telling the truth"[638]. The defense stated that the psychiatrist's opinion would be based on information from the defendant, his medical records, his family and friends. That the psychiatric evidence will help establish lack of intent, help establish that Turner was likely to be easily provoked and to show that Turner was likely to have told the truth in his statements.[639] In the psychiatric report, Dr. Smith stated that "from all accounts his personality has always been that of a placid, rather quiet and passive person who is quite sensitive to the feelings of other people. He was always regarded by his family and friends as an even-tempered person who is not in any way aggressive. In general until the night of the crime he seems to have displayed remarkably good impulse control".[640]

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[637] Id, at 838.

[638] Id, at 840.

[639] Id.

[640] Id, at 839.

The Crown (prosecution) objected to the admission of this evidence. The Crown argued that the psychiatric evidence should not be admitted. Mr. Calcutt, the prosecution counsel argued that the evidence should be excluded because, first, the defendant had not put his character in issue, and second that the report did not mention the fact that the defendant was convicted in November 1971 for unlawful possession of an offensive weapon and was also convicted in May 1972 of assault with intent to rob.[641] The Crown argued that allowing the psychiatric evidence would "put the defendant before the jury as having a character and disposition which in the light of his previous record of violence he had not got"[642].

At Bristol Crown Court, Justice Bridge ruled that the psychiatric evidence was irrelevant and inadmissible. Justice Bridge also stated that the evidence was inadmissible hearsay character evidence. Turner was convicted and sentenced to life imprisonment. He appealed, arguing that the judge erred by excluding the psychiatric evidence. He also contended that it was error for the trial judge to rule that provocation was not a matter for expert medical evidence.

The Court of Appeal agreed with the trial judge that the psychiatric evidence was hearsay character evidence and therefore inadmissible. Lord Justice Lawton, delivering the judgment, stated that "it is not for this court to instruct psychiatrists how to draft their reports, but those who call psychiatrists as witnesses should remember that the facts upon

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[641] Id.

[642] Id, at 834.

which they base their opinions must be proved by admissible evidence. This elementary principle is frequently overlooked".[643]

The Court of Appeal held that:

> Before a court can assess the value of an opinion it must know the facts upon which it is based. If the expert has been misinformed about the facts or has taken irrelevant facts into consideration or has omitted to consider relevant ones, the opinion is likely to be valueless. In our judgment, counsel calling an expert should in examination in chief ask his witness to state the facts upon which his opinion is based. It is wrong to leave the other side to elicit the facts by cross-examination.[644]

On the issue of whether the psychiatric evidence was relevant to the facts of the case, the Court of Appeal disagreed with the trial judge's ruling that it was irrelevant. Lord Justice Lawton stated that:

> In our judgment the psychiatrist's opinion was relevant. Relevance, however, does not result in evidence being admissible: it is a condition precedent to admissibility. Our law excludes evidence of many matters which in life outside the courts sensible people take into consideration when making decisions. Two broad heads of exclusion are hearsay and opinion. As we have already pointed out, the psychiatrist's report contained a lot of hearsay which was inadmissible. A ruling on this ground, however, would merely have trimmed the psychiatrist's evidence: it would not have excluded it altogether. Was it inadmissible because of the rules relating to opinion evidence? [645]

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[643] Id, at 840.

[644] Id.

[645] Id, at 841.

The Court of Appeal stated that the foundation of these rules was laid down in *Folkes v. Chadd*. It was held "that, since the question whether the defendant was suffering from a mental illness as defined by the Mental Health Act 1958 was not in issue, the psychiatric evidence that the defendant was not suffering from a mental illness although admissible, was irrelevant and had been rightly excluded"[646]. Lord Justice Lawton said:

> We all know that both men and women who are deeply in love can, and sometimes do, have outbursts of blind rage when discovering unexpected wantonness on the part of their loved ones: the wife taken in adultery is the classical example of the application of the defence of "provocation"; and when death or serious injury results, profound grief usually follows. Jurors do not need psychiatrists to tell them how ordinary folk who are not suffering from any mental illness are likely to react to the stresses and strains of life. It follows that the proposed evidence was not admissible to establish that the defendant was likely to have been provoked. The same reasoning applies to its suggested admissibility on the issue of credibility. The jury had to decide what reliance they could put upon the defendant's evidence. He had to be judged as someone who was not mentally disordered. This is what juries are empanelled to do. The law assumes they can perform their duties properly. The jury in this case did not need, and should not have been offered, the evidence of a psychiatrist to help decide whether the defendant's evidence was truthful.[647]

The Court of Appeal dismissed the case and concluded that "we are firmly of the opinion that psychiatry has not yet become a satisfactory substitute for the common sense of juries or magistrates on matters within their experience of life"[648].

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[646] Id, at 834.

[647] Id, at 841.

[648] Id, at 843.

In England, a technique, method or field of knowledge does not have to be generally accepted before it can be admitted. However, it must be sufficiently established to be reliable, before it can be admitted. This was established in *R v. Robb*,[649] where it was held that general acceptance was not a condition for the admissibility of expert testimony. In this case, a phonetics lecturer was allowed by the trial court to give expert opinion on voice identification. The expert was qualified by training and experience but in his analysis he used a method which was not generally accepted by the majority of the experts in the field unless it was supplemented by another form of acoustic analysis based on physical measurements of resonance frequency. The defendant objected to the admission of this evidence. The trial judge however, admitted the evidence. The defendant was convicted and he appealed.

The Court of Appeal, through Lord Justice Bingham stated that the trial judge did not err in admitting the evidence and upheld the judgment. It was also held that expert evidence does not have to be scientific to be admitted. Lord Justice Bingham said:

> Expert evidence is not limited to the core areas. Expert evidence of fingerprinting, handwriting, and accident reconstruction is regularly given. Opinions may be given of the market value of land, ships, pictures, or rights. Expert opinions may be given of the quality of commodities, or on the literary, artistic, scientific or other merit of works alleged to be obscene. Some of these fields are far removed from anything which could be called a formal scientific discipline. Yet while receiving this evidence the courts would not accept the evidence of an astrologer, a soothsayer, a witch-doctor or an amateur psychologist and might hesitate to receive evidence of attributed authorship based on stylometric analysis.[650]

[649] *R v. Robb, (1991) 93 Cr. App. R. 161.*

[650] Id, at 164.

It should also be noted that in *R v. Stockwell*,[651] it was held that "one should not set one's face against fresh developments, provided they have a proper foundation"[652].

Having examined the main rules guiding the admission of expert testimony in England, we now examine specifically the admissibility of offender profiling evidence. In contrast to United States, offender profiling has not been admitted by any court in England. The first case where the prosecution sought to introduce offender profiling evidence was in *R v. Stagg,*[653] where the trial judge refused to admit the evidence. In *Stagg*, Justice Ognall stated that there was "no authority in any common law jurisdiction to the effect that such evidence has ever been treated as properly admissible in proof of identity"[654]. The trial judge was highly critical of the manner in which the evidence was gathered. Justice Ognall also stated that "it was doubtful that psychological profile evidence is sufficiently well established or 'generally accepted' as a scientific method to be received as expert evidence. And that such a novel technique must satisfy tests such as those in Frye v. US (1923) and Daubert v. Merrell Dow (1993)". Justice Ognall further stated that he "would not wish to give encouragement either to investigating or prosecuting authorities to construct or seek to supplement their cases on this kind of basis"[655]. Following the rejection of the evidence, the case collapsed. There was no full trial. There has been no attempt since then by any party to introduce such evidence in the English courtroom. This

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[651] *R v. Stockwell, (1993) Cr. App.R. 260.*

[652] Lord Taylor C.J., in R v. Stockwell, (1993) Cr. App.R. 260, 264

[653] supra at 51, 52, 277.

[654] *R v. Stagg, Central Criminal Court, 14 September, 1994*

[655] Id.

leads us to the question – How will English courts receive offender profiling evidence in future?

Lord Taylor, the Lord Chief Justice of England is not in support of the admission of offender profiling in the courtroom. In a lecture delivered to the British Academy of Forensic Science on November 1, 1994, Lord Taylor echoed the problems with the proliferation of experts in court and was critical of the introduction of offender profiling evidence in courts.[656] Lord Taylor called on experts to maintain integrity and clarity, and he said:

> Sometimes, however, although helpful in criminal investigation, a technique may not produce admissible evidence. So-called 'personality profiling' is an example: used properly, this technique can be of great assistance in helping the police to target their investigative work upon a limited number of likely suspects.
>
> But we must not confuse such techniques, or their results, with evidence admissible in a court of law. The rules of criminal evidence have grown up gradually over many years. Some of them, particularly the embargo on hearsay, are now of dubious value and I hope will soon be extensively reformed as the Royal Commission has recommended. But the rules have grown up in response to the essential need to ensure that the material which is considered by the jury is only that which, as a matter of logic, actually tends to demonstrate guilt or innocence, not that which creates a suspicion and therefore, invites the making of assumptions for which there is no proper basis. The rules exist to ensure that a conviction of a criminal offence is founded upon fact not guesswork or conjecture. They afford vital protection of our freedom under the law.[657]

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[656] Rt. Hon. Lord Taylor of Gosforth, "The Lund Lecture", Medicine, Science and the Law, Vol. 35, No. 1, January 1995, at 3.

[657] Id.

Professor Ormerod maintained that if offender profiling evidence is introduced in English courts in future, that the two hurdles of the law of evidence have to be overcome – relevance and admissibility.[658] He argued that the profile must render the facts more probable or less probable before it is legally relevant. He also noted that "English courts have, in recent years, adopted a strict interpretation of relevance in relation to both prosecution and defence evidence"[659]. Professor Ormerod contended that a typical profile contains much information and that not all of the information will be relevant to any given case.[660]

It has also been argued that in England, profile evidence will be excluded as being insufficiently relevant, unreliable, prejudicial and unscientific.[661] Ormerod and Sturman argued that "unless a profiler can show that psychology can support with sufficient strength a claim that he can reliably and consistently identify behavioural traits from scenes of crime and related information the evidence would lack a reliable foundation, and the English courts would rule it inadmissible"[662]. Professor Ormerod concluded that "the prosecutor seeking to rely on a profile (if such a thing exists) or even part of a profile

[658] Ormerod, supra note 412, at 867.

[659] Id.

[660] Id.

[661] Ormerod and Sturman, supra note 414, at 182.

[662] Id, at 184.

will have to navigate his way through practically all the most difficult rules of evidence"[663]. Professor Ormerod further maintained that:

> The rules of evidence also present difficulties for the criminal psychologist. If involved in the presentation of the case the criminal psychologist will have to face extensive questioning as to his expertise, the reliability of his methodology and working practices, the availability of alternative methodologies and their success rates. There would also be the inevitably detailed and testing questions in the light of evidence provided by the opposing party's own criminal psychologist who will have cast doubt on the methodology, the interpretations etc. In addition, the psychologist will have been constrained by the evidential rules even before setting foot in court. The hearsay rule will inhibit reliance on data even though it may be the most reliable available, the provisions of the Police and Criminal Evidence Act 1984 will also necessitate the proof of computer reliability.
>
> In the case of a prosecution profile, the story does not end there. In the event that all of these problems are overcome by both the psychologist and the prosecutor, the court may still exclude the evidence, in its discretion, on the ground that it would be unfair to the accused.[664]

Professor Ormerod further argued that English courts will exclude offender profiling evidence because of its extreme prejudice. He contended that "the prejudice contained in a profile will in almost all cases exceed the limited probative value of such an opinion"[665]. Ormerod contended that offender profiling evidence will not be accorded much weight by the trier of fact because of its unreliability. Hence, "in any future trial in

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[663] David Ormerod, "Criminal Profiling: Trial by Judge and Jury, not Criminal Psychologist", in D. Canter (ed) Profiling in Policy and Practice, 242 (1999)

[664] Id, at 243.

[665] Ormerod, supra note 412, at 877.

which is sought to adduce psychological profile evidence, these problems of reliability will be a hotly contested issue"[666].

In fact, there are three main areas where offender profiling evidence is likely to be ruled inadmissible if it is introduced in a future trial in England. First, and as we have noted throughout this research, offender profiling is a technique without any adequate, reliable or objective foundation at the moment. As such, English courts will likely rule it inadmissible based on the *Turner* rule which requires that expert evidence must be based on facts which can themselves be proved by admissible evidence. If offender profiling evidence is introduced again in an English court, the trial judge is also likely to draw on United States court decisions that have rejected the evidence. English courts will likely adopt the decision in *State v. Cavallo,*[667] where the Supreme Court of New Jersey held that "until the scientific reliability of this type of evidence is established, it is not admissible"[668].

The extreme prejudicial effect of offender profiling evidence is also another area where it is likely to be excluded in future trials in England. Indeed as Professor Ormerod and Sturman have pointed out "the prejudicial effect includes risks that the jurors could: convict a defendant on the basis of the characteristic alone (where it is reprehensible); assign a disproportionate weight to the evidence of the characteristic; deny the accused

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[666] Id, at 870.

[667] supra at 224.

[668] *State v. Cavallo, 88 N.J. 508, 529, 443 A.2d 1020 (1982).*

the benefit of doubt and convict on less than the full standard of proof; and the police could be inclined to 'round up the usual suspects'"[669].

Above all, where the manner and methods of offender profiling were questionable, a trial judge will apply Section 78 of PACE (Police and Criminal Evidence Act, 1984), and exclude the evidence. This is one rule that may be applied to exclude offender profiling evidence in any future trial in English courts. Under Section 78 of PACE, a judge is allowed to exclude evidence "if it appears to the court that, having regard to all the circumstances in which the evidence was obtained, the admission of the evidence would have such an adverse effect on the fairness of the proceedings that the court ought not to admit it".

In England, expert testimony on any form of offender profiling is not likely to be excluded merely on the hearsay rule. There are many exceptions to the rule. In fact, in *R v. Abadom,*[670] it was held that once the primary facts on which an opinion is based have been proved by admissible evidence, the expert is entitled to draw on the work of others as part of arriving at his own conclusions. This was also supported in *English Exporters (London) v. Eldonwall Limited.*[671] Professor Uglow also maintained that "where the primary information consists mainly or entirely of hearsay, the judge would be justified in warning the jury about the flimsiness of any foundation for that opinion".[672]

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[669] Ormerod and Sturman, supra note 414, at 185.

[670] *R v. Abadom, [1983] 1 WLR 126.*

[671] *English Exporters (London) v. Eldonwall Limited, [1973] Ch. 415, Chancery Division.*

[672] Uglow, supra note 173, at 623.

In the final analysis, one can safely say that in England, there are more rules and reasons supporting the exclusion of offender profiling evidence than are rules or reasons for its admission. Offender profiling deals with character traits, is too prejudicial than probative, not based on any reliable or objective data at the moment and Section 78 of PACE gives judges the wide discretion to exclude such evidence that is unfair to an accused.

Canada

Canada is a close neighbor of United States. It is not surprising therefore, that some forms of offender profiling have been admitted in Canadian courtrooms. There is general disagreement amongst scholars as to whether there is a specific rule governing the admissibility of expert evidence in Canada. As Professor Bernstein has pointed out, "most courts have adopted some version of a reliability test, while a minority apply the general acceptance test".[673] Arguably, the main rule governing the admissibility of expert evidence in Canada today was laid down in *R v. Mohan,*[674] where the Supreme Court of Canada laid down four factors that should be examined when faced with a decision to admit or exclude expert evidence. Prior to *Mohan*, two court rulings provided some

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[673] David E. Bernstein, "Junk Science in the United States and the Commonwealth", 21 Yale J. Int'l L. 123, 140 (Winter 1996).

[674] *R v. Mohan, 89 C.C.C 3d 402 (1994);114 D.L.R (4th) 419; 1994 D.L.R LEXIS 1297.*

guidelines to trial judges. The first is *R v. Beland,*[675] a case that involved the admissibility of polygraph. In this case, the defendant offered polygraph evidence but the prosecution argued that it should be excluded because it has not reached an acceptable standard of reliability. Delivering the judgment, Justice McIntyre stated that "even the finding of a significant percentage of error in the results of a polygraph would not by itself, be sufficient to exclude it as an instrument for use in courts"[676]. The second case is *R v. Lavellee,*[677] where evidence of battered woman syndrome was ruled admissible. Delivering the opinion, Justice Wilson stated that expert evidence is admissible if it was beyond the common experience and knowledge of jurors. Concurring, Justice Sopinka said that expert opinion should be based on forms of enquiry and practice accepted within the expertise.[678]

In *Mohan*, the defendant, Dr. Chikmaglur Mohan, a pediatrician was charged with four counts of sexual assault of four of his patients. The patients, all females, were aged between thirteen and sixteen at the time of the assaults. The assaults took place at the defendant's medical office.[679] "The alleged assaults consisted of fondling of the girls' breasts and digital penetration and stimulation of their vaginal areas, accompanied by intrusive questioning of them as to their sexual activities. All of the complainants testified

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[675] *R v. Beland, [1987] 2 S.C.R. 398.*

[676] Id, at 417.

[677] *R v. Lavallee, 55 C.C.C 3d 97 (1990).*

[678] Id, at 132.

[679] *R v. Mohan, 114 D.L.R (4th) 419; 1994 D.L.R LEXIS 1297.*

that the respondent did not wear gloves while examining them internally. The respondent, who testified in his own defence, denied the complainants' evidence"[680].

At the trial, the defence sought to introduce a psychiatrist, Dr. Hill, "who would testify that the perpetrator of the offences alleged to have been committed would be part of a limited and unusual group of individuals and that the respondent did not fall within that narrow class because he did not possess the characteristics belonging to that group"[681]. Dr. Hill stated that he had interviewed and treated three doctors who were accused of sexual assault of their patients. He also stated that based on a psychological profile, the likely offender in the first three sexual assaults was likely to be a pedophile, and that the perpetrator of the fourth sexual assault was likely to be a sexual psychopath.[682]

> In the voir dire, Dr. Hill, the expert, began his testimony by explaining that there are three general personality groups that have unusual personality traits in terms of their psychological profile perspective. The first group encompasses the psychosexual who suffers from major mental illnesses (e.g., schizophrenia) and engages in inappropriate sexual behaviour occasionally. The second and largest group contains the sexual deviation types. This group of individuals shows distinct abnormalities in terms of the choice of individuals with whom they report excitement and with whom they would like to engage in some type of sexual activity. The third group is that of the sexual psychopaths. These individuals have a callous disregard for people around them, including a disregard for the consequences of their sexual behaviour towards other individuals. Another group would include pedophiles who gain sexual excitement from young adolescents, probably pubertal or post-pubertal.[683]

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[680] Id.

[681] Id.

[682] *R v. Mohan, 89 C.C.C 3d 402 (1994);114 D.L.R (4th) 419, 423; 1994 D.L.R LEXIS 1297.*

[683] Id.

Dr. Hill stated that pedophiles and sexual psychopaths constitute an unusual and limited class of individuals. Dr. Hill stated that he was of the opinion that Mohan does not possess the characteristics of pedophiles or sexual psychopaths and so would not have sexually assaulted the four victims. The trial judge, Justice Bernstein, ruled that the testimony was inadmissible. Justice Bernstein stated that the testimony was unnecessary and that the jury could decide for themselves. Justice Bernstein said:

> The evidence of Doctor Hill is not sufficient, I believe, to establish that doctors who commit sexual assaults on patients are in a significantly more limited group in psychiatric terms than are other members of society. There is no scientific data available to warrant that conclusion. A sample of three offenders is not a sufficient basis for such a conclusion. Even the allegations of the fourth complainant are not so unusual, as sex offenders go, to warrant a conclusion that the perpetrator must have belonged to a sufficiently narrow class.[684]

Justice Bernstein concluded that "if the evidence was received as proposed, it would merely be character evidence of a type that is inadmissible as going beyond evidence of general reputation, and does not fall within the proper sphere of expert evidence". Mohan was convicted and sentenced to nine months imprisonment on each count, concurrently and two years probation.[685]

The defendant appealed and the Crown also appealed arguing that the sentence was too light. At the Ontario Court of Appeal,[686] Finlayson J.A. ruled that the trial judge erred by

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[684] Id, at 425.

[685] Id, at 423.

[686] *R v. Mohan, (1992) 8 O.R. 3d 173.*

excluding the testimony by Dr. Hill. Justice Finyalson stated that the testimony was admissible on two basis.

> On the first basis, given that similar fact evidence was admitted showing that the acts compared are so unusual and strikingly similar that their similarities cannot be attributed to coincidence, Dr. Hill's testimony was admissible to show that the offences alleged were unlikely to have been committed by the same person.
>
> On the second basis, it was admissible to show that the respondent was not a member of either the unusual groups of aberrant personalities which could have committed the offences alleged.[687]

Justice Finyalson also stated that the trial judge's conclusion was based on a misapprehension of the evidence. Justice Finyalson further stated that in his view, the expert did not base his opinion only on the three cases with three doctors, but based his opinion on all of his experience.[688] The Court of Appeal therefore, reversed the judgment and remanded for a new trial.

The case reached the Supreme Court of Canada, where Justice Sopinka stated that "on the basis of the principles relating to exceptions to the character evidence rule and under the principles governing the admissibility of expert evidence, the limitations on the use of this type of evidence require that the evidence in this case be excluded"[689]. The Supreme Court of Canada held that the admission of expert evidence depends on the application of

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[687] *R v. Mohan, 89 C.C.C 3d 402 (1994);114 D.L.R (4th) 419, 426; 1994 D.L.R LEXIS 1297.*

[688] Id, at 426.

[689] Id, at 427.

the following criteria – (a) relevance; (b) necessity in assisting the trier of fact; (c) the absence of any exclusionary rule; and (d) a properly qualified expert.[690]

On the relevance of expert evidence, Justice Sopinka stated that:

> Relevance is a threshold requirement for the admission of expert evidence as with all other evidence. Relevance is a matter to be decided by a judge as question of law. Although prima facie admissible if so related to a fact in issue that it tends to establish it, that does not end the inquiry. This merely determines the logical relevance of the evidence. Other considerations enter into the decision as to admissibility. This further inquiry may be described as a cost benefit analysis, that is "whether its value is worth what it costs": ... Cost in this context is not used in its traditional economic sense but rather in terms of its impact on the trial process. Evidence that is otherwise logically relevant may be excluded on this basis, if its probative value is overborne by its prejudicial effect, if it involves an inordinate amount of time which is not commensurate with its value or if it is misleading in the sense that its effect on the trier of fact, particularly a jury, is out of proportion to its reliability.[691]

Justice Sopinka further stated that "in summary, therefore, it appears from the foregoing that expert evidence which advances a novel scientific theory or technique is subjected to special scrutiny to determine whether it meets a basic threshold of reliability and whether it is essential in the sense that the trier of fact will be unable to come to a satisfactory conclusion without the assistance of the expert. The closer the evidence approaches an opinion on an ultimate issue, the stricter the application of this principle"[692].

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[690] Id.

[691] Id.

[692] Id, at 431.

Addressing the issue of expert evidence as to disposition, Justice Sopinka stated that in his opinion,

> In order to be relevant on the issue of identity the evidence must tend to show that the accused shared a distinctive unusual behavioral trait with the perpetrator of the crime. The trait must be sufficiently distinctive that it operates virtually as a badge or mark identifying the perpetrator.
>
> Conversely, the fact that the accused is a member of an abnormal group some of the members which have the unusual behavioral characteristics shown to have been possessed by the perpetrator is not sufficient. In some cases it may, however, be shown that all members of the group have the distinctive unusual characteristics. If a reasonable inference can be drawn that the accused has these traits then the evidence is relevant subject to the trial judge's obligation to exclude it if its prejudicial effect outweighs its probative value. The greater the number of persons in society having these tendencies, the less relevant the evidence on the issue of identity and the more likely that its prejudicial effect predominates over its probative value.[693]

The Supreme Court of Canada also held that:

"Psychiatric evidence with respect to the personality traits or disposition of an accused, or another is admissible provided:

(a) the evidence is relevant to some issue in the case;

(b) the evidence is not excluded by a policy rule;

(c) the evidence falls within the proper sphere of expert evidence.

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[693] Id.

One of purposes for which psychiatric evidence may be admitted is to prove identity when that is an issue in the case, since psychical as well as physical characteristics may be relevant to identify the perpetrator of the crime".[694]

"Psychiatric evidence with respect to the personality traits or disposition of the accused, or another, if it meets the three conditions of admissibility above set out, is also admissible, however, as bearing on the probability of the accused, or another, having committed the offence".[695] Justice Sopinka further stated that "where the crime under consideration does not have features which indicate that the perpetrator was a member of an abnormal group, psychiatric evidence that the accused has a normal mental make-up but does not have a disposition for violence or dishonesty or other relevant traits frequently found in ordinary people is inadmissible. The psychiatric evidence in the circumstances postulated is not relevant on the issue of identity to exclude the accused as the perpetrator any more than the possession of violent or dishonest tendencies by the accused or a third person would be admissible to identify the accused or the third person as the perpetrator of the crime".[696]

The Supreme Court of Canada therefore reversed the judgment of the Court of Appeal and upheld the trial court's ruling.

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[694] Id, at 435.

[695] Id.

[696] Id.

In *R v. Ranger,*[697] the Ontario Court of Appeal ruled that the trial judge erred by admitting expert testimony on crime scene staging, where the expert went into 'criminal profiling'. On August 16, 1995, two sisters Marsha (19) and Tamara Ottey (16) were stabbed to death in their home in Scarborough. The defendant, Rohan Ranger and his cousin Adrian Kinkead were charged with the murders. The defendants were tried and convicted separately. Marsha was the Ranger's girlfriend but she ended the relationship because the defendant was very possessive and abusive. The Crown claimed that Ranger refused to accept that the relationship was over and that Ranger killed Marsha after he heard that Marsha was moving to United States to start college. The prosecution claimed that Ranger killed Marsha because "if he could not have her, nobody else can"[698].

The defendant claimed that he was not in the house at the time of the murders and that Kinkead committed the murders. Police investigation showed that the house was ransacked but only three items belonging to Marsha were taken. The three items were a gold necklace given to Marsha by the defendant, a videotape of Marsha playing soccer and Marsha's electronic organizer.[699] The Crown therefore, decided to call a crime scene reconstruction expert and criminal profiling expert, who testified that the crime scene was staged and made to look like a burglary. The expert, Detective Inspector Kathryn Lines (Manager of the Behavioral Sciences Section of the Ontario Provincial Police) testified that the crime scene was staged by "someone who had an association or relationship with

[697] *R v. Ranger, 178 C.C.C. (3d) 375; 2003 C.C.C. LEXIS 265.*

[698] Id, at 378.

[699] Id.

the victim, M., and who had a particular interest in M.'s possessions".[700] Detective Inspector Lines stated that she based her opinion on the crime scene photographs, crime scene videotapes, police reports and autopsy reports.

At the trial, several witnesses testified for the Crown. Kinkead also testified for the Crown. The Crown also introduced evidence of the defendant's trip to Jamaica in January 1996, where he overstayed and was arrested. The defense argued that the evidence should be excluded because it was prejudicial. Five witnesses also testified that they saw a man fitting the description of the defendant near the victims' home around 7.30 am on the day of the murder and the day before the murders. The defendant on the other hand, introduced a security video tape showing that he was at a shopping mall at 8.08am on the day of the murder. It should be noted that the time of death of the victims was given as 7.30am. The prosecution contended that the defendant created a false alibi by going to the shopping mall so that he can be captured on the security video camera.[701]

The defense argued that the expert testimony by Detective Inspector Lines should not be admitted. They argued that the jury did not need expert assistance to determine whether the crime scene was staged or not. That the expert evidence by Detective Lines was not required since the crime scene photographs and videotapes had already been provided to the court by Detective Ian Mann.

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[700] Id.

[701] Id, at 379.

The trial judge ruled that the expert evidence was admissible and he said: "I am satisfied that opinion evidence is needed in this case in the sense that it will likely provide information that is outside the experience and knowledge of the jury. The factual issue of whether a break and entry is authentic or staged is not likely to be a subject within the common knowledge of the jurors. This, of course, is subject to the Crown qualifying the proposed expert as an expert in this particular area".[702] Detective Inspector Lines was qualified by the court as an expert on crime scene staging and her testimony was admitted.

The defendants were convicted. Ranger was convicted of first degree murder for the death of Marsha and convicted of manslaughter for the death of Tamara. He appealed, arguing that he received an unfair trial. He contended that the trial judge erred by admitting the unscientific expert evidence by Detective Inspector Lines; that the trial judge erred by admitting evidence of his arrest in Jamaica; and that the trial judge's instructions to the jury were insufficient. The defendant also argued that the expert evidence did not meet the reliability or necessity criteria as required by the Supreme Court decision in *Mohan*.

At the Court of Appeal, Charron J.A, ruled that the trial judge erred and that there were five errors. Delivering the opinion of the Court, Justice Charron said: "... Detective Inspector Lines's testimony was not confined to the opinion that the crime scene was staged. Notwithstanding the Crown's assurance that he would not elicit evidence relating to motivation, Detective Inspector Lines' examination-in-chief included an opinion about

[702] Id, at 388.

the motivation of the perpetrator for staging the scene and a description of the most likely suspects as someone who had a particular interest in Marsha Ottey".[703]

Justice Charron restated the fact that the *Mohan* requirements must be satisfied and she said; "The party seeking to introduce expert opinion evidence must meet four criteria: relevance, necessity, the absence of any other exclusionary rule, and a properly qualified expert. Even where these requirements are met, the evidence may be rejected if its prejudicial effect on the conduct of the trial outweighs its probative value. The first two criteria and the assessment of whether the probative value outweighs the prejudicial effect also include an inquiry into the reliability of the proposed evidence".[704]

Justice Charron also stated that the *Mohan* criteria applies on a case by case basis. Justice Charron further stated that "Detective Inspector Lines' testimony, from the outset, went far beyond the scope of properly admissible evidence and, eventually, profiling that, in my view, was clearly inadmissible". Furthermore, "the manner in which the crime scene evidence was packaged for the jury in this case exemplifies the usual dangers associated with expert opinion evidence".[705] Justice Charron stated that:

> In this case, Detective Inspector Lines' opinions about the perpetrator's likely motivation for staging the crime scene and his characteristics as a person associated with the victims and having a particular interest in Marsha constituted evidence of criminal profiling. Criminal profiling is a novel field of scientific evidence, the reliability of which was not

[703] Id, at 390.

[704] Id, at 394.

[705] Id, at 398.

> demonstrated at trial. To the contrary, it would appear from her limited testimony about the available verification of opinions in her field of work that her opinions amounted to no more than educated guesses. As such, her criminal profiling evidence was inadmissible. The criminal profiling evidence also approached the ultimate issue in this case and, hence, was highly prejudicial. The prejudice was further heightened by the limits placed on defence counsel's cross-examination and by the prominence that the trial judge gave to Detective Inspector Lines' evidence in his charge.[706]

Charron J.A, also ruled that the evidence about the defendant's trip and arrest in Jamaica was of no probative value and was very prejudicial. The Court of Appeal concluded that the errors were harmful and remanded for a new trial.

In *R v. Clark,*[707] the Court of Appeal for Ontario ruled that expert evidence on crime scene staging was admissible even though it went into criminal profiling. This is quite in contrast with its prior decision in *Ranger* discussed above. On December 26, 1995, the bodies of William Tweed and his wife Phyllis were found in their home in Thornhill, Ontario. They have been stabbed to death. Police investigators suspected that the perpetrator had staged the crime scene to show forced entry and burglary. The defendant, Clark, was the main suspect. Investigations showed that a few weeks before the murders that Clark had stolen the victims' credit card and used it to buy an engagement ring for his girlfriend.[708] It should be noted that the defendant lived with his grandmother near the Tweeds and that his grandmother was very close to the Tweeds. The defendant also visits

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[706] Id, at 405.

[707] *R v. Clark, 69 O.R. (3d) 321; 2004 Ont. Rep. LEXIS 25.*

[708] Id, at 325.

the Tweeds regularly as he helps them out with some odd jobs. They were so close that the Tweeds gave his grandmother a duplicate key to their house to keep in case of emergency.[709]

It should be pointed out that blood stains found on the defendant's pants matched Mr. Tweed's DNA. Furthermore, while he was in custody, the defendant confided in his cell mate (an undercover police officer), Sergent Matthews, that he stabbed the Tweeds and that he could not understand how the police were still able to detect blood on his pants because he had washed the pants after the murders.[710]

The defendant admitted stealing the credit card but denied the murders. He stated that another man, Marcel Whyte committed the murders.[711] At the trial, the Crown called a crime scene reconstruction expert to testify. Detective Inspector Kathryn Lines stated that the crime scene examination revealed elements of crime scene staging and that one individual was responsible for the murders. She stated that she based her opinion on the crime scene photographs, crime scene videotapes, personal visit to the house, police reports and autopsy reports. Detective Inspector Lines testified that the crime scene had been staged to look like a burglary, and that the killer was "someone who had some knowledge or relationship with the victims and some knowledge of the layout of their apartment".[712] She also stated that it was a blitz-attack and that the victims were sleeping

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[709] Id, at 326.

[710] Id, at 327.

[711] Id, at 331.

[712] Id, at 322.

at the time they were killed. In his ruling, Justice Peter Howden admitted the evidence. The defendant was convicted of two counts of murder and he appealed.

Among other claims, the defendant argued that the expert testimony by Detective Inspector Lines should not have been admitted because it was unnecessary, unreliable and too prejudicial than probative. The defendant also argued that much of the testimony by Detective Inspector Lines constituted inadmissible criminal profiling evidence.

Delivering the opinion of the Court of Appeal, Justice Moldaver ruled that the trial judge did not err in admitting the expert evidence. Justive Moldaver however, stated that a small amount of the evidence was impermissible criminal profiling evidence, but the small amount could not have affected the outcome. The Court of Appeal held that:

> A properly qualified expert in crime scene analysis can offer opinion evidence about what occurred at the crime scene and how the crime was committed (crime scene reconstruction evidence). Crime scene reconstruction evidence is potentially admissible. Its ultimate acceptance or rejection will depend on whether it conforms with the rules that govern the admissibility of expert evidence in general. In respect of crime scene reconstruction evidence, the following three areas will generally require close attention: whether the evidence is necessary in the sense that it is likely to fall outside the knowledge or normal experience of the average juror; whether the opinion is reliable in the sense that it is anchored in the evidence and not the product of guesswork or speculation; and whether there is a real danger that the jury will be overwhelmed by the evidence and give it more weight than it deserves. Crime scene reconstruction evidence is to be contrasted with expert evidence offered to explain why the crime was committed in a particular manner (the perpetrator's motivation) more particularly, who is more likely to have committed the crime ("criminal profiling evidence"). Criminal profiling evidence will generally be inadmissible, as criminal profiling is a novel field of scientific evidence and often appears to be based on nothing more than educated guesses. In this case, the police officer's evidence

> that the crime scene was staged was properly admitted, as was her evidence as to how the crime was committed. She was qualified to express an opinion about staging and her evidence fell outside the knowledge and experience of the average juror. Her opinion was reliable in the sense that it was anchored in the evidence and not the product of guesswork or speculation, and the evidence of staging was not so complex or technical that the jury was likely to be overwhelmed by it and give it more weight than it deserved.[713]

Justice Moldaver went on to say that the expert evidence was not an opinion on the ultimate issue. Justice Moldver stated that there was overwhelming evidence against the defendant that the some amount of criminal profiling could not have affected the outcome.[714]

In dismissing the appeal, Justice Moldaver stated that the crime scene reconstruction evidence was properly admitted even though it contained some amount of criminal profiling evidence. This is quite in contrast with the Court's earlier ruling in *Ranger* on the admissibility of criminal profiling evidence. This case also supports our call for extra judicial control in all cases involving offender profiling or its derivatives.

Offender Profiling in Other Countries

Offender profiling is still in its infancy but it has been used in criminal investigations in a few countries, including Australia, Finland, Italy, Japan, Netherlands, Russia and South

[713] Id, at 323.

[714] Id.

Africa. This does not mean that it has been admitted in the courtroom. In Australia, offender profiling per se has not been admitted in any court. There has been no major court decision banning the reception of offender profiling evidence in courts. Under the Australian rules of evidence, expert testimony is admissible if it is relevant to the facts at issue and not excluded by other evidence rules, such as the expertise rule, the common knowledge rule, the factual basis rule and the ultimate issue rule. Generally speaking, and as Petherick et al have pointed out, "the rules of expert evidence in Australia allow for profiling as expert testimony, even if only in a limited fashion, perhaps in some lower levels of the criminal justice system. As profiling receives more attention through practical application and academic literature, it stands to reason that it will receive a greater chance of being accepted in court".[715]

In Finland, offender profiling is only used in crime investigations. It is not admissible in courts. Courts see offender profiling and its derivatives as an aid to crime investigation, not admissible evidence. In Netherlands, the Criminal Investigative analysis/FBI approach has been adopted, and is done by the Offender Profiling Unit of the National Intelligence Division of the National Police Agency.

As we mentioned earlier, offender profiling technique is still in its infancy, hence the technique is not used in many countries, especially the developing countries. For instance, in countries like Nigeria, the technique has not been used in crime investigation.

[715] Wayne Petherick, David Field, Andrew Lowe and Elizabeth Fry, "Criminal Profiling as Expert Evidence", in Wayne Petherick (ed), Serial Crime: Theoretical and Practical Issues in Behavioral Profiling, 94 (2006).

As such, the evidential implications of such evidence has not arisen. However, it is important to examine how the courts will receive such evidence if offered in future trials. Offender profiling deals with the character traits of an individual. In Nigeria, it is likely to be seen by the courts as permissible character evidence. In Nigeria, "the general rule is that the fact an accused has committed some other offences or other misconduct on other previous occasions or is of bad character or reputation is not relevant in subsequent proceedings. The rationale behind this rule is that the accused person's guilt has to be independently proved by the prosecution. The admissibility of previous misconduct will only go to prejudice the mind of a court. Section 69(1) of the Nigerian Evidence Act,[716] provides that the fact that an accused person is of bad character is irrelevant in subsequent proceedings, but this general rule is subject to some exceptions".[717] The exceptions are contained in Section 69(2) of the Evidence Act, which states that:

"The fact that an accused person is of bad character is relevant:

(a) when the bad character of the accused person is a fact in issue;

(b) when the accused person has given evidence of his good character;

It is noteworthy to point out that Nigeria is a former colony of Britain, hence the Nigerian legal system is based on the English common law tradition. In fact, the Nigerian rules of expert evidence is virtually the same as that of England. Thus, a witness must be qualified as an expert and the opinion must be outside the experience and knowledge of

[716] Evidence Act, Laws of the Federation, 1990.

[717] Adah C. Eche, The Nigerian Law of Evidence, 115 (2000).

the judge or jury.[718] In Nigeria, the general principle is that the facts upon which an expert based his opinion must be provided. This is where offender profiling evidence will likely be ruled inadmissible if it is to be introduced in a Nigerian court today. The Nigerian Supreme Court will likely draw from the position of English courts on the admissibility of offender profiling. They are also likely to state that such evidence should not be admitted until its reliability can be established. Thus, in *Dickson Arisa v. The State,*[719] the Supreme Court of Nigerian ruled that opinion evidence by an expert on mental disease/natural mental infinity had no evidential weight because the expert failed to provide the basis for his opinion. Justice Agbaje stated that the law required that for expert evidence to be admitted, the facts upon which the opinion was based must be provided. Nigerian courts may not accord much weight to expert evidence where the factual basis was not produced.[720] Furthermore, "where there are two conflicting expert opinions, the court will rely on that of the expert who shows the data on which he based his opinion".[721] It should also be noted that in Nigeria, a technique, method or field of knowledge does not have to be scientific before it can be admitted. In a nut shell, the main area where offender profiling evidence is likely to be excluded in Nigeria, in future, is the lack of reliable data upon which the technique is based. The prejudicial effect of offender profiling will probably be another strong area for exclusion of offender profiling evidence.

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[718] There is a legal provision for a jury in Nigerian, but jurors are not used. The trier of fact is the judge and whether expert opinion will assist him is not an issue to be contested by the parties.

[719] Dickson Arisa v. The State, [1988] 7 S.C.N.J (Pt.1) 76, 84.

[720] Adah, supra note 717, at 126.

[721] Id.

In this chapter, we have examined the state of offender profiling in various jurisdictions. In all jurisdictions examined in this work, the trial judge has enormous latitude to decide who is qualified to give expert evidence and when such evidence is needed. Similarly, no jurisdiction examined in this study requires an expert to have gained the expertise in a certain way. An expert can be qualified by education, skill, training, or knowledge. All jurisdictions appear to be liberal in deciding who is qualified to give expert testimony.

Conclusion

Offender profiling is a crime investigation technique that is normally used when an offender did not leave any physical traces at the scene of crime. It aims to predict the likely characteristics of the unknown offender by looking at behavioral patterns and other non physical clues. Profiling in general was not originally intended to be used for crime investigation or for courtroom purpose. Offender profiling began from the early attempts by criminologists to explain criminality and to predict criminals. It then moved on to the next stage of using it to profile heads of states (for intelligence purposes only and not for crime investigation). Later, psychiatrists and psychologists starting providing psychological profiles because they felt it could assist the police to find unknown killers. Following this stage, the FBI discovered that psychological profiles were indeed very helpful in their pursuit of unknown serial killers, and they devoted much attention into it and came up with their crime scene analysis approach. Today offender profiling has become one of the most controversial, useful, but worrying technique of crime investigation. It is submitted that we should now move on to the next stage of using offender profiling as a crime prevention technique.

This dissertation concludes that there is an uneasy relationship among the different segments involved with offender profiling. All the different segments/approaches to offender profiling have a parochial view. Each segment sees offender profiling as their own monopoly, their exclusive club. As a result, the potential of offender profiling has been limited. Therefore the sharing of knowledge and experience is suggested. We need

an integrated approach, whereby all the segments can come together as a team. This will also ensure that we move on to the next level of using offender profiles in producing crime prevention measures. Psychiatrists, psychologists, criminologists, and law enforcement agents all have a role to play, not only in crime investigations, but also in coming up with crime prevention measures and programs. These professionals have knowledge of the kind of individuals likely to commit certain types of crime, knowledge of the location a particular crime is likely to happen, and knowledge about the type of individual that is likely to be a victim of a certain type of crime. Therefore, by coming together as a team and pulling resources together, the future of offender profiling looks very exciting and will prove to be an invaluable technique of crime investigation and crime prevention. As we have seen, offender profiling has not yet reached the level to be called a hard science at the moment, but in time it will be. It has been pointed out elsewhere that "if a technique cannot be proved, then it is not science"[722]. Offender profiling at the moment cannot be proved, therefore, it is not science.

The current lack of unity, cooperation, and absence of sharing information among the different segments further creates a legal dilemma – how much can one convince the courts as to the reliability and validity of offender profiling? Until all the different segments come together as a team, the search for the scientific basis and for general acceptance of this technique will continue to be a mirage. A way forward in the United States, for instance, will be the establishment of a professional body for offender profilers where all the different professionals can come together and become members. The well-established professional bodies can play a big role in this issue by organizing well

[722] Ebisike, supra note 12, at 93.

publicized interdisciplinary conferences, where all the different segments should be encouraged to attend and present papers. Such professional bodies, as the American Psychological Association, the Academy of Forensic Sciences, and the Society for Police and Criminal Psychology are best suited for this function. There is no gainsaying the fact however, that offender profiling at the moment is a 'specialized field of knowledge,' that is very useful in crime investigation. At the moment, there has been the tendency for the different segments to publish their work in their own preferred/particular journals. This is also hampering the potential of offender profiling.

This research study has shown that at the moment, all the different approaches base their arguments on assumptions, inferences, on probabilities, on personal intuition, as well as on their clinical practice experience. Suffice it to say therefore, that none of these approaches can properly be described as being sufficiently reliable as to be used in proving the guilt or innocence of a defendant. We have also seen that offender profiling at best should be described as a multi-disciplinary practice that calls for knowledge and experience in such fields as criminology, psychiatry, psychology and law enforcement.

This study supports the idea put forward by Professor David Ormerod that for offender profiling to be easily admitted in courts, the profile should be produced by a 'profiling team' rather than by individual profilers. We believe that courts are reluctant to accept expert opinion of a profiler because more of it is based on personal intuition.

The three main rules governing the admissibility of expert testimony in United States have their various strengths and weaknesses. Arguably, the *Frye* test offers ease of application. Trial judges do not have to become scientists to be able to decide on scientific evidence, thereby ensuring less burden on trial judges. The Federal Rule of Evidence 702 is too loose and too liberal. Almost anything can be admitted as expert evidence – be it scientific, technical or other specialized knowledge. Similarly, almost anybody can qualify as an expert under the Federal Rule of Evidence 702, either by way of knowledge, skill, experience, training or education. *Daubert* has proved very problematic in application, and is arguably not favored by many trial judges. *Daubert* has raised more questions than answers.

Our examination of the three rules has shown the confusion and inconsistencies resulting from the adoption of these three rules of admissibility. This leads to one obvious question – is it possible to adopt one particular rule? The *Frye* test, the *Federal Rules of Evidence* and *Daubert* are not constitutional constructions. As such they are not binding on the states. The United States operates a federal system of government. Hence, the states have always enjoyed the freedom to choose the rule they prefer. Above all, the United States Supreme Court has not given any reason why states should adopt one particular rule.

It is hereby submitted that *Frye*, combined with the Federal Rules of Evidence, offers the most appropriate standard for the admissibility of expert testimony. This is not new and its success has been noted in *Christophersen v. Allied –Signal Corp.*,[723] It is submitted

[723] *supra* at 132.

that the United States Supreme Court should revisit the issue and give the lower courts and the states reasons justifying the need for the adoption of one rule. Then we can have some sort of uniformity in judicial decisions. Then the lower courts will not face the risk of having their decision reversed, simply because their state has adopted a rule different from the one adopted by the federal courts.

One of the main issues surrounding the admissibility of expert testimony has been on general acceptance. Many states are in favor of the *Frye* test. Interestingly, many trial judges generally accept and prefer the *Frye* test. Several research studies have supported this argument.[724] Dahir et al, for instance, carried out a study of 325 state trial judges (from the 50 states and the District of Columbia) and found out that there is "a strong tendency for judges to continue to rely on more traditional standards such as general acceptance and qualifications of the expert when assessing psychological syndrome and profile evidence."[725] Their study also suggests that "judges do understand some of the less technical guidelines (i.e., general acceptance and peer review and publication) but not the more technical ones (i.e., falsifiability and error rate), and that they prefer general acceptance and qualifications of the expert as guidelines when determining the admissibility of psychological evidence."[726] The study therefore, concluded that "judges

[724] See generally, Veronica B. Dahir., James T. Richardson., Gerald P. Ginsburg., Sophia I. Gatowski., Shirley A. Dobbin, and Mara L. Merlino, "Judicial Application of Daubert to Psychological Syndrome and Profile Evidence", 11 Psychol. Pub. Pol'y & L. 62, 74 (March 2005).

[725] Veronica B. Dahir., James T. Richardson., Gerald P. Ginsburg., Sophia I. Gatowski., Shirley A. Dobbin, and Mara L. Merlino, "Judicial Application of Daubert to Psychological Syndrome and Profile Evidence", 11 Psychol. Pub. Pol'y & L. 62, 73 (March 2005).

[726] Id, at 75.

are relying on criteria and habits of analysis familiar to them (mainly *Frye v. United States's [1923]* general acceptance standard, relevance, and qualifications and credibility of the expert) even as they struggle with new ideas foisted on them from above."[727] It makes sense therefore, to adopt a standard which is generally accepted by trial judges as being the appropriate standard, bearing in mind that these trial judges are the 'gatekeepers.'

Offender profiling is a multidisciplinary practice that falls under many disciplines. Offender profiling is largely based on intuition, guesswork and speculation. At the moment it can best be described as an art with the potential of becoming a science. When it comes to general acceptance, offender profiling should be generally accepted as being sufficiently reliable by the general profiling community, not just the law enforcement community. At the moment, it is only those in the law enforcement segment/community that see offender profiling or its derivatives as reliable techniques for courtroom purposes. Until the different segments come together as a team, offender profiling should not be taken as a technique that has achieved widespread recognition as to be admitted/introduced into the courtroom as evidence.

This research has noted that many of the experts who give testimony on offender profiling have the tendency to flaunt their qualifications in front of the courts. The result is that courts tend to be seduced by these impressive and sometimes "intimidating credentials". This also results in many of these experts testifying beyond their expertise.

[727] Id, at 78.

What is happening today is that many of the profilers who are supposed to be criminal investigators have now assumed the role of criminal prosecutors. They tend to forget that their role is to testify and not to decide cases. It is therefore, submitted that there should be extra judicial control when dealing with expert testimony on offender profiling. In all cases involving offender profiling, the trial judge should inform the jury at the onset that offender profiling evidence does not identify a specific offender; that it is not identification evidence; and that its reliability cannot be objectively ascertained at the moment. The trial judge should limit the testimony to patterns of behavior and crime scene characteristics, which in some cases may assist the trier of fact in understanding the circumstances of a case. It is worrying that in some cases, profile testimony has even been admitted by trial courts, when it was clearly irrelevant to the case, as in *United States v. Baldwin.*[728] There should be a jury instruction in all cases involving offender profiling and its derivatives. The trial judge should inform the jury about the level of reliability and validity of this technique. This will help them to determine the weight (if any) that should be accorded to the testimony.

The above problem has been compounded by the Federal Rule of Evidence 702 which as we have found out in this study is too liberal. Almost anybody can qualify as an expert either by knowledge, skill, experience, training or education. Offender profiling as we have seen falls under a specialized field of knowledge, but Rule 702 has created problems for trial judges when deciding who is qualified to give expert offender profiling testimony.

[728] *United States v. Baldwin, 418 F.3d 575 (Ohio. 2005).*

This research has also noted that offender profiling testimony is more effective when it is being proffered by the defendant to show innocence, than when it is being offered by the prosecution to show that the defendant is likely to have committed the crime. This argument merits further research though. Offender profiling is also effective when there are co-defendants and it is being offered to show that one defendant is less likely to have committed the crime. With offender profiling evidence, it is easier to prove innocence than guilt, but this does not mean that it is reliable.

Offender profiling per se, is supposedly inadmissible in many jurisdictions, including the United States and Canada. However, when it is labeled differently and dressed up in other terms, courts have admitted it. Perhaps this is because many people including judges do not understand what offender profiling is and the different forms or shapes of offender profiling. Or is it that some criminal profilers are playing on the intelligence of judges, lawyers and jurors? It is suggested that more research is needed in this area. If an expert witness says that he or she is going to testify on 'offender profiling', it will not be allowed, but if the same expert says he or she is going to testify on the same thing under a different label, then it will be allowed. Two of the cases in Canada at least have clearly highlighted this issue. There are other cases where an expert has been allowed to testify for instance, on crime scene staging, and then had gone beyond that area and eventually touched on the ultimate issue. It seems therefore, that in many cases, whether any form of offender profiling will be admitted depends on the label the expert is using, not on the content/issue involved. In United States for instance, profiling evidence on motivational analysis has been allowed in some cases. In Canada on the other hand, expert testimony

on motivational analysis is supposedly not allowed, but when it is dressed up as testimony on crime scene reconstruction analysis, then it may be admitted. Who is fooling who?

After a critical examination of issues and several cases we conclude that offender profiling is not sufficiently reliable as to be admissible. It is also submitted that offender profiling is too prejudicial than probative. The findings of this research also supports my claim that there is an uneasy relationship among the different segments involved with offender profiling. As a result, the potential of this technique has been limited. There are doubts as to the reliability and validity of this technique. It is submitted that offender profiling should not be used in the courtroom until its reliability can be properly and objectively ascertained. The guessing game of offender profiling should not be played in the courtroom. Offender profiling and its derivatives should not be admitted until their reliability can be objectively ascertained. Offender profiling is a technique based on probabilities and we conclude that no individual should be convicted on probability.

Table of Cases

Bibliography

Ainsworth, B. P., *Offender Profiling and Crime Analysis*; Devon, Willan Publishing, (2001).

Alison, L., Bennell, C., Mokros, A., and Ormerod, D., "The Personality Paradox in Offender Profiling: A Theoretical Review of the Process Involved in Deriving Background Characteristics from Crime Scene Actions", *8 Psychology, Public Policy and Law*; 115 – 135 (2002).

Alison, L., Smith, M., Eastman, O., and Rainbow, L, "Interpreting the Accuracy of Offender Profiles"; *9 Psychology, Crime and Law,* 185 – 195 (2003).

Alison, L. J., Smith, M., Eastman o., and Rainbow, L., "Toulmin's Philosophy of Argument and its Relevance to Offender Profiling"; *9 Psychology, Crime and Law,* 173 – 183, (2003).

Alison, L., West, A., and Goodwill, A., "The Academic and the Practitioner: Pragmatists' Views of Offender Profiling"; *10 Psychology, Public Policy and Law*, 71 – 100, (March/June 2004).

Alison, L., (Eds.), *The Forensic Psychologist's Casebook: Psychological Profiling and Criminal Investigation*; Devon, Willan Publishing, (2005).

Allen, J. R., "Expertise and the Daubert Decision"; *The Journal of Criminal Law and Criminology*, Volume 84, Number 4., 1157 – 1175, (1993-94).

Atikian, M. K., "Nasty Medicine: Daubert v. Merrell Dow Pharmaceuticals, Inc. Applied to a Hypothetical Medical Malpractice Case; *27 Loyola Los Angeles Law Review*, 1513 – 1557, (June 1994).

Ault, R. L., and Reese, J. T., "A Psychological Assessment of Crime Profiling"; ... *FBI Law Enforcement Bulletin*, 22 - 25 (1980).

Badcock, J. R., "Developmental and Clinical Issues in Relation to Offending in the Individual"; in J. L. Jackson., and D. A. Bekerian, *Offender Profiling: Theory, Research and Practice*, Chichester, John Wiley (1997).

Bartol, C., *Criminal Behavior: A psychosocial Approach*; New Jersey, Prentice Hall, (5th ed. 1999).

Bartol, C., "Police Psychology: Then, Now and Beyond"; *23 Criminal Justice and Behavior*, 70 – 79 (1996).

Bazelon, L.D., "Coping with Technology through the Legal Process"; *Cornell Law Review*, volume 62, Number 5., 817 – 828, (June 1977).

Becker, R. E., and Orenstein, A., "The Federal Rules of Evidence After Sixteen Years – The Effect of "Plain Meaning" Jurisprudence, The Need for an Advisory Committee on the Rules of Evidence, and Suggestions for Selective Revision of the Rules"; *George Washington Law Review*, Volume 60, Number 4., 857 – 914, (1992).

Bennell, C., and Jones, N. J., "Between a ROC and a Hard Place: A Method for Linking Serial Burglaries by Modus Operandi"; *2 Journal of Investigative Psychology* and *offender Profiling*, 23 – 41, (2005).

Bennell, C., Jones, J. N., Taylor, J. P., and Snook, B., "Validities and Abilities in Criminal Profiling: A Critique of the Studies Conducted by Richard Kocsis and his Colleagues"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 50, Number 3, 344 – 360, (June 2006).

Bennell, C., Corey, S., Taylor, A., and Ecker, J., "What Skills are Required for Effective Offender Profiling? An Examination of the Relationship between Critical Thinking Ability and Profile Accuracy"; Paper Presented at the 35th Annual Conference of the Society for Police and Criminal Psychology, Washington/Chevy Chase Maryland, (October, 2006).

Bernstein, E. D., "Frye, Frye, Again: The Past, Present, and the Future of the General Acceptance Test"; *41 Jurimetrics Journal*, 385 – 407, (Spring 2001).

Black, B., "A Unified Theory of Scientific Evidence"; *Fordham Law Review*, Volume 56, 595 – 694, (1988).

Blau, H. T., *The Psychologist as Expert Witness*; New York, John Wiley, (1984).

Bleil, C., "Evidence of Syndromes: No Need for a "Better Mousetrap"; *32 South Texas Law Review*, 27 – 76, (1990).

Blinka, D. D., "Expert Testimony and the Relevancy Rule in the Age of Daubert"; *Marquette Law Review*, Volume 90, Number 2., 173 – 226, (Winter 2006).

Boon, J., and Davies, G., "Criminal Profiling"; 9 *Policing*, 218 - 227, (1993).

Boon, J. C. W., "Offender Profiling: Distinguishing the Media Prurience from Real-Life Science"; *1 Inter Alia*, 31 – 35, (1995).

Boon, J., "Contribution of Personality Theories to Psychological Profiling", in J. L. Jackson., and D. A. Bekerian, (Eds.), *Offender Profiling: Theory, Research* and *Practice*, Chichester, John Wiley, (1997).

Borders, D. J., "Fit to be Fryed: Frye v. United States and the Admissibility of Novel Scientific Evidence"; 77 Kentucky Law Journal, 849 – 879, (Sept/Oct. 1989).

Boyce, N. R., "Judicial Recognition of Scientific Evidence in Criminal Cases"; *8 Utah Law Review*, 313 – 327, (1964).

Bretz, J. R., "Scientific Evidence and the Frye Rule: The Case for a Cautious Approach"; *4 Cooley Law Review*, 506 – 521, (1987).

Britton, P., "Editorial: Articulating a Systematic Approach to Clinical Crime Profiling"; *70 Criminal Behaviour and Mental Health*, 13 – 17, (1997).

Britton, P., *The Jigsaw Man*; London, Bantam Press, (1997).

Britton, P., *Picking up the Pieces*, Bantum Press, (2000).

Brussel, J. A., *Casebook of a Crime Psychiatrist*; New York, Simon and Schuster,(1968).

Burgess, A., Douglas, J., D'Agostino, R., Hartman, C., and Ressler, R., "Sexual Killers and their Victims: Identifying Patterns through Crime Scene Analysis"; *Journal of Interpersonal Violence*, Volume 1, Number 3., 288 – 308, (September 1986).

Canter, D., "Offender Profiling"; *2 Psychologist*, 12 – 16, (1989).

Canter, D., and Heritage, R., "A Multivariate Model of Sexual Offence Behaviour: Developments in Offender Profiling"; *Journal of Forensic Psychiatry*, Volume 1, Number 2., 185 – 212, (1990).

Canter, D., and Larkin, P., "The Environmental Range of Serial Rapists"; *13 Journal of Environmental Psychology*, 63 – 69, (1993).

Canter, D., *Criminal Shadows: Inside the Mind of the Serial Killer*; London, HaperCollins, (1994).

Canter, D., "Profiling as Poison"; *Inter-alia*, Volume 2, Number 1., 10- 11, (1998).

Canter, D., and Alison, L., (Eds.), *Profiling Property Crimes*; Ashgate, Aldershot, (2000).

Canter, D., and Alison, L., (Eds.), *Profiling Rape and Murder*; Ashgate, Aldershot, (2000).

Canter, D., "Offender Profiling and Investigative Psychology"; *Journal of Investigative Psychology and Offender Profiling*, Volume 1, Number 1, 1 – 15, (December 2003).

Canter, D., Alison, J. L., Alison, E., and Wentink, N., "The Organized/Disorganized Typology of Serial Murder"; *10 Psychology, Public Policy and Law*, 293 – 320, (September 2004).

Cameron, E., "Some Psychoanalytic Aspects of Serial Homicide"; *24 Cardozo Law Review*, 2267 – 2285, (August 2003).

Chisum, W. J., and Turvey, E. B., *Crime Reconstruction;* San Diego, Academic Press, (2007).

Christian, V., "Admissibility of Scientific Expert Testimony: Is Bad Science Making Law?; *18 Northern Kentucky Law Review,* 21 – 40, (Fall 1990).

Cleary, W. E., "Preliminary Notes on Reading the Rules of Evidence"; *57 Nebraska Law Review*, 908 – 919, (1978).

Cleary, W. E., Brown, S. K., Dix, E. G., Gellhorn, E., Kaye, H. D., Meisenholder, R., Roberts, E. F., and Strong, W. J., *McCormick on Evidence*, St. Paul. Minn., West Publishing, (3rd ed., 1984).

Cochran, Q. D., "Alabama v. Clarence Simmons: FBI "Profiler" Testimony to Establish an Essential of Capital Murder"; *23 Law and Psychiatry Review*, 69 – 89, (1999).

Cooley, C., and Turvey, B., "Reliability and Validity: Admissibility Standards Relative to Forensic Expert's Illustrated by Criminal Profiling Evidence, Testimony and Judicial Rulins"; *Journal of Behavioral Profiling*, Volume 3, Number 1, (2002).

Cook, E. P., and Hinman, L. D., "Criminal Profiling: Science and Art"; *Journal of Contemporary Criminal Justice*, Volume 15, Number 3, 230 – 241, (August 1999).

Copson, G., *Coals to Newcastle? Part 1: A Study of Offender Profiling*, London: Police Research Group Special Series, Home Office, (1995).

Curran, J. W., "Expert Psychiatric Evidence of Personality Traits"; *University of Pennsylvania Law Review*, Volume 103, Number 8, 999 – 1019, (1955).

Dabney, A., Dean, D. L., Topalli, V., and Hollinger, C. R., "The Impact of Implicit Stereotyping on Offender Profiling: Unexpected Results from an Observational Study of Shoplifting"; *Criminal Justice and Behavior*, Volume 33, Number 5, 646 – 674, (October 2006).

Dahir, B. V., Richardson, T. J., Ginsburg, P. G., Gatowski, I. S., Dobbin, A. S., and Merlino, L. M., "Judicial Application of Daubert to Psychological Syndrome and Profile Evidence", *11 Psychology, Public Policy and Law*, 62 – 82, (March 2005).

Davies, A., "Rapists Behaviour: A Three Aspect Model as a Basis for Analysis and Identification of a Serial Crime"; *Forensic Science International*, 173 – 194, (1992).

Davies, A., "Editorial: Offender Profiling"; *Medicine, Science and Law*, Volume 34, Number 3, 185 – 186, (1994).

Davies, A. J., "Criminal Personality Profiling and Crime Scene Assessment: A Contemporary Investigative Tool to Assist Law Enforcement Public Safety"; *Journal of Contemporary Criminal Justice*, Volume 15, Number 3, 292 – 301, (August 1999).

Davies, D., and Follette, C. W., "Rethinking the Probative Value of Evidence: Base Rates, Intuitive Profiling, and the "Postdiction" of Behavior"; *Law and Human Behavior*, Volume 26, Number 2, 133 – 158, (April 2002).

DeNevi, D., and Campbell, J., *Into the Minds of Madmen: How the FBI's Behavioral Science Unit Revolutionalized Crime Investigation*, New York, Prometheu Books, (2003).

Dietz, P. E., and Reese, J. T., "The Perils of Police Psychology: 10 Strategies for Minimizing Role Conflicts when Providing Mental Health Services and Consultation to Law Enforcement Agencies"; *4 Behavioral Sciences and the Law*, 385 – 400, (1986).

Dietz, P., "Criminal Investigative Analysis ("Profiling") in Civil Litigation"; Association of Trial Lawyers of America, Annual Convention Reference Materials, Volume 2, (July 2003).

Douglas, E .J., Ressler, K. R., Burgess, W. A., and Hartman, R. C., "Criminal Profiling from Crime Scene Analysis"; *Behavioral Sciences and the Law*, Volume 4, Number 4, 401 – 421, (1986).

Douglas, E. J., Burgess, A. E., "Criminal Profiling: A Viable Investigative Tool Against Violent Crime"; *12 FBI Law Enforcement Bulletin*, 1 – 5, (1986).

Douglas, E. J., and Munn, C., "Violent Crime Scene Analysis: Modus Operandi, Signature, and Staging"; 61 *FBI Law Enforcement Bulletin*, 1 – 10, (1992).

Douglas, E. J. and Olshaker, M., *Mindhunter: Inside the FBI's Elite Serial Crime Unit*, New York, Pocket Books, (1996).

Douglas E. J., and Olshaker, M., *Journey into Darkness*, New York, Scribner, (1997).

Douglas, J., and Olshaker, M., *Anatomy of Motive*, New York, Scribner, (1999).

Douglas, E. J., and Douglas, K. L., "Modus Operandi and the Signature Aspects of Violent Crime", in Douglas, E. J., Burgess . W. A., Burgess .G A., and Ressler, K. R., *Crime Classification Manual*, San Francisco, Jossey-Bass, (2nd ed. 2006).

Douglas, E. J., Burgess . W. A., Burgess .G A., and Ressler, K. R., *Crime Classification Manual: A Standard System for Investigating and Classifying Violent Crimes;* San Francisco, Jossey-Bass, (2nd ed. 2006).

Duncan, L. K., "Lies, Damned Lies, and Statistics"? Psychological Syndrome Evidence in the Courtroom After Daubert"; *71 Indiana Law Journal*, 753 – 771, (1996).

Duruigbo, A.E., *Multinational Corporations and International Law: Accountability and Compliance in the Petroleum Industry*, New York, Transnational Publishers, (2003).

Dwyer, D., "Evidence – Federal Rules of Evidence Supersede General Acceptance Standard for Admissibility of Scientific Evidence – Daubert v. Merrell Dow Pharmaceuticals, Inc., *28 Suffolk University Law Review*, 252 – 260, (Spring 1994).

Ebisike, N., *An Appraisal of Forensic Science Evidence in Criminal Proceedings*, London, Greenway Press, (2001).

Eche, C. A., *The Nigerian Law of Evidence*; Lagos, Malthouse Press, (2000).

Egger A. S., "Psychological Profiling: Past, Present, and Future"; Journal of *Contemporary Criminal Justice*, Volume 15, Number 3, 242 – 261, (1999).

Faigman, L. D., Porter E., and Saks, J. M., "Check your Crystal Ball at the Courthouse Door, Please: Exploring the Past, Understanding the Present, and Worrying about the Future of Scientific Evidence"; *15 Cardozo Law Review*, 1799 – 1835 (1994).

Faigman, L. D., Kaye, D. H., Saks, M. J., and Sanders, J., *Science in the Law: Standards, Statistics, and Research Issues;* St. Paul. Minn., Westgroup, (2002).

Farrell, G. M., "Daubert v. Merrrell Dow Pharmaceuticals, Inc.: Epistemiology and Legal Prosess"; *15 Cardozo Law Review*, 2183 – 2217, (1994).

Farrell, S. N., "Congressional Action to Ammend Federal Rule of Evidence 702: A Mischievous Attempt to Codify Daubert v. Merrell Dow Pharmaceuticals, Inc."; *13 Journal of Contemporary Health Law and Policy*, 523 – 551, (Spring 1997).

Farrington, D., and Lambert, S., "Statistical Approaches to Offender Profiling", in D. Canter and L. Allison (Eds.), *Profiling Property Crimes*, 233 – 273, Aldershot, Ashgate, (2000).

Faukner, F. J., and Steffen, T. D., "Evidence of Character: From the :Crucible of the Community" to the "Couch of the Psychiatrist"; *102 University of Pennsylvania Law Review*, 980 – 994, (1954).

Feehan, G. J., "Life After Daubert and Kumho Tire: An Update on Admissibility of Expert Testimony"; *88 Illinois Bar Journal*, 134 – 142, (March 2000).

Feldman, L. C. M., "May I Have the Next Dance, Mrs. Frye?"; *69 Tulane Law Review,* 793 – 807, (February 1995).

Fenicato, M. A., "PA Supreme Court Unable to Rule on Daubert and/or Frye Rules"; *Lawyers Journal*, Volume 3, Number 3, 3 , (February 2001).

Foster, R. K., and Huber, W. P., *Judging Science: Scientific Knowledge and the Federal Courts*; Cambridge, Mass., The MIT Press, (1997).

Fradella, F. H., Fogarty, A., O'Neill, L., "The Impact of Daubert on the Admissibility of Behavioal Science Testimony"; *30 Pepperdine Law Review*, 403 – 444, (2003).

Friedland, S. I., Bergman., and Taslitz, A. E., *Evidence Law and Practice*; New York, LexisNexis/Matthew Bender, (2000).

Friedman, D. R., "The Death and Transfiguration of Frye"; *34 Jurimetrics Journal*, 133 – 148, (Winter 1994).

Friedman, D. R., *The Elements of Evidence*; St. Paul, Minn., Westgroup, (2nd ed. 1998).

Fullgrabe, U., "Criminal Profiling"; *Corrections Today*, 297 – 305 and 373 – 376, (1993).

Garofalo, B. R., *Criminology*, Translation. R. W. Millar, Boston, Little and Brown, (1914).

Geberth, J. V., "The Signature Aspect in Criminal Investigations"; *Law and Order*, Volume 43, Number 11, (November 1995).

Geberth, J. V., *Practical Homicide Investigation: Tactics, Procedures and Forensic Techniques*; Boca Raton, CRC Press/Taylor and Francis, (4th ed. 2006).

Gildea, S. L., "Sifting the Dross: Expert Witness Testimony in Minnesota After the Daubert Trilogy"; *26 William Mitchell Law Review*, 93 – 116, (2000).

Giannelli, C. P., "The Admissibility of Novel Scientific Evidence: Frye v. United States , A Half-Century Later"; *80 Columbia Law Review*, 1197 – 1250, (1980).

Giannelli, C. P., "Daubert: Interpreting the Federal Rules of Evidence"; *15 Cardozo Law Review*, 1999 – 2026, (1994).

Giannelli, P., and Imwinkelried E., "Scientific Evidence: The Fallout from Supreme Court's Decision in Kumho Tires"; *14 Criminal Justice*, 12 – 19, (Winter 2000).

Glueck, S., and Glueck, E., *Physique and Delinquency*; New York, Harper and Bros., (1956).

Godwin, J., *Murder USA: The Ways We Kill Each Other*; New York, Ballantine (1978).

Godwin, M., and Canter, D., "Encounter and Death: The Spatial Behavior of US Serial Killers"; 20 Policing: *An International Journal of Police Strategy and Management*, Volume 20, Number 1, 24 – 38, (1997).

Godwin, G. M., *Hunting Serial Predators: A Multivariate Approach to Profiling Violent* Behavior, ... (1999).

Godwin, G. M., (Eds.), *Criminal Psychology and Forensic Technology: A Collaborative Approach to Effective Profiling*, Boca Raton, CRC Press, (2001).

Goldsworthy, T., "Criminal Profiling: Is it Investigatively Relevant?; *The Journal of Behavioral Profiling*, Volume 2, Number 1, (June 2001).

Gonzalez, L., "The Admissibility of Scientific Evidence: The History and Demise of Frye v. United States"; *48 University of Miami Law Review*, 371 – 397, (November 1993).

Goring, C., *The English Convict: A Statistical Study*, London, His Majesty's Stationery Office, (1913).

Gottfreddson, R. M., and Hirschi, T., *A General Theory of Crime*; Stanford, Stanford University Press, (1990).

Graham, H. M., *Handbook of Federal Evidence;* Volume 3, St. Paul., Minn., Thomson West, (6th ed. 2006).

Gross, H., *Criminal Psychology;* New Jersey, Patterson Smith, (4th ed.1924).

Grubin, D., "Offender Profiling"; *Journal of Forensic Psychology*, Volume 6, Number 2, 259 – 263 (1995).

Gudjonsson, G., "The Admissibility of Expert Psychological and Psychiatric Evidence in England and Wales"; *Criminal Behaviour and Mental Health*, (1992).

Gudjonsson, G., "The Implications of Poor Psychological Evidence in Court"; *2 Expert Evidence*, 12 - 124, (1992).

Gudjonsson, G. H., and Copson, G., "The Role of the Expert in Criminal Investigation", in J. L. Jackson and D. A. Bekerian, (Eds.), *Offender Profiling: Theory, Research* and *Practice*, Chichester, John Wiley, (1997).

Hagan, F. E., *Introduction to Criminology*; Chicago, Nelson-Hall Publishers, (3rd ed. 1994).

Hagen, A. M., *Whores of the Court: The Fraud of Psychiatric Testimony and Rape of American Justice*, New York, Regan Books, (1997).

Hakkanen, H., "Finnish Research Team Applies Psychological Science to Police Work"; *Psychology International*, Volume 14, Number 1, 1, 4 – 5, (Winter 2003).

Hakkanen, H., Lindlof, P., and Santtila, P., "Crime Scene Actions and Offender Characteristics in a Sample of Finnish Stranger Rapes"; *Journal of Investigative Psychology and Offender Profiling*, Volume 1, Number 1, 17 – 32, (December 2003).

Hand, L., "Historical and Practical Considerations Regarding Expert Testimony"; 15 *Harvard Law Review*, 40 – 58, (1902).

Hanson, S. R., "James Alphonzo Frye Is Sixty-Five Years Old: Should He Retire?; *Western State University Law Review*, Volume 16, Number 2, 357 – 460, (Spring 1989).

Hazelwood, R. R. and Douglas, E. J., "The Lust Murderer"; *49 FBI Law Enforcement* Bulletin, 18 – 22, (1980).

Hazelwood, R. R., Dietz, E. P., and Warren, J., "The Criminal Sexual Sadist"; 61 *FBI Law Enforcement Bulletin*, 12 – 20, (February 1992).

Hazelwood, R. R., and Burgess, A. W.,(Eds.), *Practical Aspects of Rape Investigation: A Multidisciplinary Approach*; Boca Raton, CRC Press, (3rd ed. 2001).

Hazelwood, R. R., and Warren, J. I., "Linkage Analysis: Modus Operandi, Ritual, and Signature in Serial Sexual Situations"; *8 Aggression and Violent Behavior*, 587 – 598, (2003).

Hickey, E. W., *Serial Murderers and their Victims*, Belmont, California, Wadsworth Publishing, (4th ed. 2005).

Hicks, J. S., and Sales, D. B., *Criminal Profiling: Developing an Effective Science and Practice*; Washington D.C., American Psychological Association, (2006).

Hilton, K., and Irons, A., "A "Criminal Personas" Approach to Countering Criminal Creativity"; *8 Crime Prevention and Community Safety*, 248 – 259, (2006).

Holcomb, W. R., and Daniel, A. E., "Homicide Without an Apparent Motive"; *6 Behavioral Sciences and the Law*, 429 – 437, (1988).

Holmes, M. R. and Holmes, T. S., *Profiling Violent Crimes: An Investigative Tool*; Thousand Oaks, Sage Publications, (2nd ed. 1996).

Homant, J. R., and Kennedy, B. D., "Psychological Aspects of Crime Scene Profiling: Validity Research"; *Criminal Justice and Behavior*, Volume 25, Number 3, 319 – 343, (September 1998).

Hooton, A. E., *The American Criminal: An Anthropological Study*, Volume 1, Cambridge, Mass., Harvard University Press, (1939).

Hooton, A. E., *Crime and Man*, Cambridge, Mass., Harvard University Press, (1939).

Horne, M. M., "Novel Scientific Evidence; Does Frye Require that General Acceptance within the Scientific Community be Established by Disinterested Scientists?; *65 University of Detroit Law Review*, 147 – 162, (Fall 1987).

Horton, M. T. , "The Debate is Over: Frye Lives No More" *19 Thurgood Marshall Law Review*, 379 – 400, (Spring 1994).

Howlett, J., Hanfland, K., and Ressler, R., "The Violent Criminal Apprehension Program"; *55 FBI Law Enforcement Bulletin*, 14 – 18, (1986).

Imwinkeried, J. E., "a New Era in the Evolution of Scientific Evidence – A Primer on Evaluating the Weight of Scientific Evidence"; *23 William and Mary Law Review*, 261 – 290, (1981).

Imwinkeried, J. E., (Eds.), *Scientific and Expert Evidence*, New York, Practicing Law Institute, (2nd ed. 1981).

Imwinkeried, J. E., "The Standard for Admitting Scientific Evidence: A Critique from the Perspective of Juror Psychology"; *28 Villanova Law Review*, 554 – 571 (1983).

Imwinkeried, J. E., "Federal Rule of Evidence 402: The Second Revolution, *6 The Review of Litigation*, 129 – 174, (1987).

Imwinkeried, J. E., Giannelli, C. P., Gilligan, A. F., and Lederer, I. F., *Courtroom Criminal Evidence*, Virginia, The Michie Co., (2nd ed. 1993).

Imwinkeried, J. E., "A Brief Defense of the Supreme Court's Approach to the Interpretation of the Federal Rules of Evidence; *27 Indiana Law Review*, 267 – 294, (1994).

Imwinkeried, J. E., "The Next Step after Daubert: Developing a Similarly Epistemological Approach to Ensuring the Reliability of Nonscientific Expert Testimony"; *15 Cardozo Law Review*, 2271 2294, (1994).

Imwinkeried, J. E., "Moving Beyond "Top Down" Grand Theories of Statutory Construction: A "Bottom UP" Interpretive Approach to the Federal Rules of Evidence"; *75 Oregon Law Review,* 389 – 427, (1996).

Imwinkeried, J. E., "Daubert Revisited: Disturbing Implications"; *22 Champion*, 18 – 27, (May 1998).

Imwinkeried, J. E., "Whether the Federal Rules of Evidence Should be Conceived as a Perpetual Index Code: Blindness is Worse than Myopia"; *40 William and Mary Law Review*, 1595 – 1612, (1999).

Imwinkeried, J. E., "Evaluating the Reliability of Nonscientific Expert Testimony: A Partial Answer to the Questions left Unresolved by Kumho Tire Co. v. Carmichael"; *52 Maine Law Review*, 19 – 41, (2000).

Imwinkeried, J. E., *The Methods of Attacking Scientific Evidence*; New Jersey, LexisNexis, (4th ed. 2004).

Imwinkelried, J. E., *Evidentiary Foundations*; New Jersey, LexisNexis, (6th ed. 2005).

Imwinkeried, J. E., "The Importance of Daubert in Frye Jurisdictions"; Criminal Law Bulletin, Volume 42, Number 2, 5 – 17, (March-April 2006).

Ingram, S., "If the Profile Fits: Admitting Criminal Psychological Profiles into Evidence in Criminal Trials"; *54 Washington University Journal of Urban and Contemporary Law*, 239 – 266, (1998).

Innes, M., Fielding, N., and Cope, N., "The Appliance of Science ? The Theory and Practice of Criminal Intelligence Analysis"; *45 British Journal of Criminology*, 39 – 57, (2005).

Jackson, J.D., "The Ultimate Issue Rule: One Rule too Many"; *Criminal Law Review*, 75 – 86, (1984).

Jackson L. J., and Bekerian, A. D., (Eds.), *Offender Profiling: Theory, Research* and *Practice;* Chichester, John Wiley, (1997).

Jenkins, P., *Using Murder: The Social Construction of Serial Homicide*, New York, Aldine De Gruyter, (1994).

Jensen, J. P., "Frye Versus Daubert: Practically the Same?; *87 Minnesota Law Review*, 1577 – 1619, (May 2003).

Johnson, H. E., *Crime, Correction, and Society;* Illinois, The Dorsey Press, (3rd ed. 1974).

Jonakait, N. R., "The Meaning of Daubert and What that Means for Forensic Science"; *15 Cardozo Law Review*, 2103 – 2117, (April 1994).

Kantrowitz, A., "Controlling Technology Democratically"; *63 American Scientist*, 505 – 509 (1975).

Kaye, H. D., Bernstein, E. D., and Mnookin, L. J., *The New Wigmore: A Treatise on Evidence*, New York, Aspen Publishers, (2004).

Keane, A., *The Modern Law of Evidence*, London, Butterworths, (1989).

Keane, P., "Ethical Issues and Role of the Judge"; Paper Presented at the 2004 ABA Judicial Division's Traffic Court Seminar, San Francisco, California, October 13, 2004.

Keppel, R., "Signature Murders: A Report of Several Related Cases"; *Journal of Forensic Sciences*, Volume 40, Number 4, 670 – 674, (July 1995).

Keppel, R., *Signature Killers*; New York, Pocket Books, (1997).

Kennedy, B. D., and Homant, J. R., "Problems with the Use of Criminal Profiling in Premises Security Litigation"; *20 Trial Diplomacy Journal*, 223 – 229, (1997).

Kiely, T. F., *Forensic Evidence: Science and the Criminal Law*; Boca Raton, Taylor and Francis, (2nd ed. 2006).

Knight, A., Warren, I. J., Reboussin, R., and Soley, J. B., "Predicting Rapist Type from Crime-Scene Variables"; *Criminal Justice and Behavior*, Volume 25, Number 1, 46 – 80, (March 1998).

Kocsis, N. R., Cooksey, W. R., and Irwin, J. H., "Psychological Profiling of Offender Characteristics from Crime Behaviors in Serial Rape Offences"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 46, Number 2, 144 – 169, (2002).

Kocsis, N. R., Cooksey, W. R., and Irwin, J. H., "Psychological Profiling of Sexual Murders: An Empirical Model"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 46, Number 5, 532 – 554, (2002)

Kocsis, N. R., "Criminal Psychological Profiling: Validities and Abilities"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 47, Number 2, 126 – 144, (2003).

Kocsis, N. R., Heller, Z. G., and Try, A., "Visual Versus Narrative Case Material: The Impact on Criminal Psychological Profiling"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 47, Number 6, 664 – 676, (2003).

Kocsis, N. R., and Middledorp, J., "Believing is Seeing 111: Perceptions of Content in Criminal Psychological Profiles"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 48, Number 4, 477 – 494, (2004).

Kocsis, N. R., 'Validities and Abilities in Criminal Profiling: The Dilemma for Gavid Canter's Investigative Psychology"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 50, Number 4, 458 – 477, (August 2006).

Kocsis, N. R., *Criminal Profiling: Principles and Practice;* New Jersey, Humana Press, (2006).

Kretschemer, E., *Physique and Character: An Investigation of the Nature of Constitution and the Theory of Temperament*, New York, Harcourt, (1925).

Lane, B., *The Encyclopedia of Forensic Science;* London, Headline, (1992).

Langer, C. W., *The Mind of Adolf Hitler*; New York, Basic Books, (1972).

Leiter, B., "The Epistemology of Admissibility: Why Even Good Philosophy of Science Would Not Make for Good Philosophy of Evidence"; *Brigham Young University Law Review*, 803 – 820, (1997).

Lester, D. J., *Writing Research Papers: A Complete Guide;* New York, HaperCollins, (8th ed. 1996).

Levin, J., and Fox, J. A., *Mass Murder;* New York, Plunem, (1985).

Liebert, J., "Contributions of Psychiatric Consultation in the Investigation of Serial Murder"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 29, Number 3, 187 – 199, (1985).

Lilly C. Graham., *An Introduction to the Law of Evidence*; St. Paul. Minn., Wset Publishing, (3rd ed. 1996).

Lipson, S. A., *Is it Admissible?*; Costa Mesa, CA., James Publishing, (2007).

Lombroso, C., L'Uoma Delinquente; Fratella Bocca, Turin, (1876).

Lombroso, C., *Crime: Its Causes and Remedies*, Boston, Little, Brown and Co., (1918).

Markle, A., *Criminal Investigation and Presentation of Evidence*; St. Paul, Minn., West Publishing, (1976).

Makros, A., and Alison, L. J., "Is Offender Profiling Possible? Testing the Predicted Homology of Crime Scene Actions and Background Characteristics in a Sample of Rapists"; *7 Legal and Criminological Psychology*, 25 – 43, (2002).

Maletskos, C., and Spielman, S., Introduction of New Scientific Methods in Court, Law Enforcement Science and Technology, 957 – 958, (S.S. Yefsky, Eds. 1967).

Maliver, D., "Out of the FRYE ING Pan and into Daubert: Trial Judges at the Gate will not Spell Relief for Plaintiffs"; *56 University of Pittsburgh Law Review*, 245 – 269, (Fall 1994).

Mair, K., "Can a Profile Prove a Sex Offender Guilty?'; *Expert Evidence*, 139 (1995).

Martin, A. J., "The Proposed "Science Court"; *75 Michigan Law Review*, 1058 – 1091, (1977).

Maskin, A., "The Impact of Daubert on the Admissibility of Scientific Evidence: The Supreme Court Catches Up with a Decade of Jurisprudence"; *15 Cardozo Law Review*, 1929 – 1943, (1994).

Mauch, E. J., and Birch, W. J., *Guide to Successful Thesis and Dissertation: A Handbook for Students and Faculty;* New York, Marcel Dekker, Inc., (3rd ed. 1993).

McCaghy, H. C., and Capron, A. T., *Deviant Behavior: Crime, Conflict and Interest Groups*; New York, (3rd ed. 1994).

McCann, T. J., "Criminal Personality Profiling in the Investigation of Violent Crime: Recent Advances and Future Directions" *10 Behavioral Sciences and the Law*, 475 – 481, (1992).

McCormick, T. C., *Handbook of the Law of Evidence;* St. Paul, Minn., West Publishing, (1954).

McCormick, M., "Scientific Evidence: Defining a New Appproach to Admissibility"; *67 Iowa Law Review*, 879 – 916, (1982).

McCord, D., "Syndromes, Profiles and Other Mental Exotica: A New Approach to the Admissibility of Nontraditional Psychological Evidence in Criminal Cases"; *66 Oregon Law Review*, 19 – 108, (1987).

McCrary, G., and Ramsland, K., The Unknown Darkness: Profiling the Predators Among US; New York, HarperTorch, (2004).

McCrary, G., Telephone Interview with him on October 27, 2006.

McGrath, G. M., "Criminal Profiling: Is there a Role for the Forensic Psychiatrist?'; *The Journal of the American Academy of Psychiatry and the Law*, 315 – 324, Volume 28, Number 3, (2000).

McLeod, A. K., "Is Frye Dying or is Daubert Doomed? Determining the Standard of Admissibility of Scientific Evidence in Alabama Courts"; *51 Alabama Law Review*, 883 – 905, (Winter 2000).

Michaud, S. G., and Hazelwood, R., *The Evil that Men Do*; New York, St. Martin's Press, (1998).

Milich, S. P., "Controversial Science in the Courtroom: Daubert and the Law's Hubris"; *43 Emory Law Journal*, 913 – 926, (1994).

Mogck, L. D., "Are We there Yet? Refining the Test for Expert Testimony through Daubert, Kumho Tire and Proposed Federal Rule of Evidence 702"; *33 Connecticut Law Review*, 303 – 336, (Fall 2000).

Moenssens, A. A., "Admissibility of Scientific Evidence – An Alternative to the Frye Rule"; *25 William and Mary Law Review*, 545 – 575, (Summer 1984).

Moenssens, A. A., Inbau, E. F., and Starra, E. J., *Scientific Evidence in Criminal Cases*; New York, The Foundation Press, (3rd ed. 1986).

Moenssens A. A., "Novel Scientific Evidence in Criminal Cases: Some Words of Caution"; *84 Journal of Criminal Law and Criminology*, 1 – 21, (Spring 1993).

Mueller, B. C., and Kirkpatrick, C. L., *Evidence*; New York, Aspen Law Publishers, (2nd ed. 1999).

Muller, A. D., "Criminal Profiling: Real Science or Just Wishful Thinking?; *Homicide Studies*, Volume 4, Number 3, 234 – 264 9August 2000).

Murphy, T., "The Admissibility of Scientific Evidence in Illinois"; *21 Loyola University of Chicago Law Journal*, 935 – 972, (Spring 1990).

Murphy, D. W., and Peters, M. J., "Profiling Child Sexual Abusers: Psychological Considerations"; *Criminal Justice and Behavior*, Volume 19, Number 1, 24 – 37, (March 1992).

Myers, E. B. J., *Evidence in Child Abuse and Neglect Cases*; New York, John Wiley, Volume 1, (3rd ed. 1997).

Neal, S. B., "Into the Minds of Madmen: How the FBI's Behavioral Science Unit Revolutionalized Crime Investigation"; *40 Trial*, 89 – 90, (May 2004).

Neufeld, P. J., "Admissibility of New or Novel Scientific Evidence in Criminal Cases, DNA Technology and Forensic Science, The Banbury Report; Coldspring Harbor Laboratory Press, (1989).

Nowikowski, F., "Psychological Offender Profiling: An Overview"; 19 Criminologist, 225 – 226, (1995).

O'Connor, S., "The Supreme Court's Philosophy of Science: Will the Real Karl Popper Please Stand Up? *35 Jurimetrics Journal*, 263 – 276, (1995).

Oleson, J., "Psychological Profiling: Does it Actually Work?; *46 Forensic Update*, 11 – 14, (1996).

Okeke N. C., *Controversial Subjects of Contemporary International Law: An Examination of the New Entities of International Law and their Treaty-Making Capacity; Little, Brown and Company,* (1973).

Okeke, N. C., *The Theory and Practice of International Law in Nigeria*; Enugu, Fourth Dimension Press, (1086).

Okeke, N. C., "International Law in the Nigerian Legal System"; *27 California Western International Law Journal*, 311 – 355, (1997).

Ormerod, C. D., "The Evidential Implications of Psychological Profiling"; *Criminal Law Review*, 863 – 877, (1996).

Ormerod, D., "Criminal Profiling: Trial by Judge and Jury, Not Criminal Psychologist", in D. Canter and L. Alison, (Eds), *Profiling in Policy and Practice*, Aldershot, Ashgate Publishing, (1999).

Ormerod, D., and Sturman, J., "Working with the Courts: Advice for Expert Witnesses", in L. Alison, (Eds), *The Forensic Psychologist's Casebook: Psychological Profiling and Criminal Investigation*, 170 – 243, (2005).

Osborn, S. A., "Reasons and Reasoning in Expert Testimony" *2 Law and Contemporary Problems*, 490 – 494, (1935).

Osborne, W. J., "Judicial/Technical Assessment of Novel Scientific Evidence"; ... *University of Illinois Law Review*, 497 – 546, (1990).

O'Toole, M., "Criminal Profiling: The FBI Use Criminal Investigative Analysis to Solve Crimes"; *Corrections Today*, Volume 6, Number ...44 – 47, (1999).

Owen, D., Criminal Minds: The Science and Psychology of Profiling; New York, Barnes and Noble, (2004).

Palermo, B. G., "Criminal Profiling: The Uniqueness of the Killer"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 46, Number 4, 383 – 385 (2002).

Palermo, B. G., and Kocsis, N. R., Offender Profiling: An Introduction to the Sociopsychological Analysis of Violent Crime; Springfield, Charles C. Thomas Publishers, (2005).

Park, C. R., Leonard, P. D., and Goldberg, H. S., Evidence Law: *A Student's Guide to the Law of Evidence as Applied in American Trials*; St. Paul, Minn., Westgroup, (1998).

Peterson, L. J., Ryan, P. J., Houlden, J. P., and Mihajlovic, S., "The Use and Effects of Forensic Science in the Adjudication of Felony Cases"; *32 Journal of Forensic Science*, 1730 – 1748, (1987).

Petherick, W., "What's in a Name? Comparing Applied Profiling Methodologies"; *5 Journal of Law and Social Challenges*, 173 – 188, (Summer 2003).

Petherick, W., *The Science of Profiling*; New York, Barnes and Noble, (2005).

Petherick, W., (Eds), *Serial Crime: Theoretical and Practical Issues in* Behavioral *Profiling*; Amsterdam, Academic Press, (2006).

Pinizzotto, A, "Forensic Psychology: Criminal Personality Profiling"; *Journal of Police Science and Administration*, Volume 12, Number 1, 32 – 40 (1984).

Pinizzotto, J. A., and Finkel, J. N., "Criminal Personality Profiling: An Outcome and Process Study"; *Law and Human Behavior*, Volume 14, Number 3, 215 – 233, (1990).

Pistorius, M., *Profiling Serial Killers and Other Crimes in South Africa*; South Africa, Penguin Books, (2005).

Polentz, C. M., "Post-Daubert Confusion with Expert Testimony"; *36 Santa Clara Law Review*, 1187 – 1218, (1996).

Porter, B., "Mindhunters: Tracking Down Killers with the FBI's Psychological Profiling Team"; *Psychology Today*, 44 – 52, (April 1983).

Prater, D. D., Capra, J. D., Saltzburg, A. S., and Arguello, M. C., *Evidence: The Objection Method*; New Jersey, LexisNexis, (2nd ed. 2002).

Reese, J., "Obsessive Compulsive Behavior"; *48 FBI Law Enforcement Bulletin*, 612 - ... (August 1979).

Ressler, K. R., Burgess, W. A., and Douglas, E. J., *Sexual Homicide: Patterns and Motives*, New York; The Free Press, (1992).

Ressler, R., and Shachtman, T., *Whoever Fights Monsters* ; New York, Pocket Books, (1992).

Richardson, R. J., *Modern Scientific Evidence: Civil and Criminal*; Cincinnati, The W.H. Anderson Co., (2nd ed. 1974).

Risinger. D. M., and Loop, L. J., "Three Card Monte, Monty Hall, Modus Operandi and "Offender Profiling": Some Lessons of Modern Cognitive Science for the Law of Evidence"; *24 Cardozo Law Review*, 193 - 285, (November 2002).

Rogers, H. W., *The Law of Expert Testimony*, St. Louis, Central Law Journal, (2nd ed. 1891).

Rossi, D., "Crime Scene Behavioral Analysis: Another Tool for the Law Enforcement Investigator"; *The Police Chief*, 152 – 155, (January 1982).

Rossi, F. F., *Expert Witnesses*; Chicago, American Bar Association, (1991).

Rossmo, D. K., "Geographic Profiling", in J. L. Jackson, and D. A. Bekerian, (Eds.), *Offender Profiling: Theory, Research and Practice*, Chichester, John Wiley, (1997).

Rossmo, D. K., Geographic Profiling; Boca Raton, CRC Press, (2000).
Rudd, G. R., *The Nigerian Law of Evidence*, London, Butterworths, (1964).

Rumbelow, D., The Complete Jack the Ripper, London, Penguin, (1988).

Saccuzzo, P. D., "Still Crazy after all these Years: California's Persistent Use of the MMPI as Character Evidence in Criminal Cases'; *33 University of San Francisco Law Review*, 379 – 400, (1999).

Saferstein, R., *Criminalistics: An Introduction to Forensic Science*; Prentice Hall, (9th ed. 2006).

Salfati, C. G., and Canter, V. D., "Differentiating Stranger Murders: Profiling Offender Characteristics from Behavioral Styles"; *17 Behavioral Sciences and the Law*, 391 – 406, (1999).

Salfati, C. G., and Bateman, A. L., "Serial Homicide: An Investigation of Behavioral Consistency"; 2 *Journal of Investigative Psychology and Offender Profiling*, 121 – 144, (2005).

Sanders, J., Diamond, S. S., and Vidmar, E., "Legal Perceptions of Science and Expert Knowledge"; *8 Psychology, Public Policy and Law*, 139 – 153, (June 2002).

Santtila, P., Ritvanen, A., and Mokros, A., "Predicting Burgler Characteristics from Crime Scene Behavior"; *6 International Journal of Police Science and Management*, 136 – 154, (2004).

Santtila, P., Fritzon, K., and Tamelander, A.L., "Linking Arson Incidents on the Basis of Crime Scene Behavior"; *19 Journal of Police and Criminal Psychology*, 1 – 16, (2005).

Scallen, A. E., "Interpreting the Federal Rules of Evidence: The Use and Abuse of the Advisory Committee Notes"; *28 Loyola Los Angeles Law Review*, 1283 – 1302, (1995).

Scallen, A. E., "Classical Rhetoric, Practical Reasoning, and the Law of Evidence"; *44 American University Law Review*, 1717 – 1749, (1994-5).

Schwartz, A., "A "Dogma of Empiricism" Revisited: Daubert v. Merrell Dow Pharmaceuticals, Inc., and the Need to Resurrect the Philosophical Insight of Frye v. United States"; *Harvard Journal of Law and Technology*, Volume 10, Number 2, 149 – 237, (Winter 1997).

Schurman-Kauflin, D., Vulture: Profiling Sadistic Serial Killers; Boca Raton, Universal Publishers, (2005).

Sheldon, H. W., *Varieties of Delinquent Youth*; New York, Harper and Bros.,(1949).

Shehab, J. M., "The Future of the Davis-Frye Test in Michigan: Rumors of Its Demise have been Greatly Exaggerated"; *University of Detroit Mercy Law Review*, 113 – 134, (Fall 19996).

Shuman, W. D., *Psychiatric and Psychological Evidence*, St. Paul. Minn., Thomson West, (3rd ed. 2005).

Skaggs, C. C., "Evidence: Say Good-Bye to the Frye "General Acceptance" Test [Daubert v. Merrell Dow Pharmaceuticals"; *33 Washburn Law Journal*, 450 – 465, (Spring 1994).

Smith, C., "Psychological Offender Profiling"; *17 The Criminologist*, 244 – 250, (1993).

Snook, B., Eastwood, J., Gendreau, P., Goggin, C., and Cullen, M. R., "Taking Stock of Criminal Profiling: A Narrative Review and Meta-Analysis"; *Criminal Justice and Behavior*, Volume 34, Number 4, 437 – 453, (April 2007).

Starrs, E. J., "A Still-Life Watercolor"; Frye v. United States"; *Journal of Forensic Sciences*, Volume 27, Number 3, 684 – 694, (July 1982).

Strano, M., "A Neural Network Applied to Criminal Psychological Profiling: An Italian Initiative"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 48, Number 4, 495 – 503, (2004).

Staurt, H. J., and Nordby, J. J., (..), *Forensic Science: An Introduction to Scientific Investigative Techniques*; CRC/Taylor and Francis, (2nd ed. 2005).

Sucharitkul, S., *State Immunities and Trading Activities in International Law*; London, Stevens and Sons, (1959).

Sucharitkul, S., "The Future of International Law"; Paper Presented at the 16th Regional Meeting of the American Society of International Law, at Golden Gate University School of Law, San Francisco, California, on April 6, 2007.

Sutherland, E. H., and Cressey, D. R., *Principles of Criminology;* J.B. Lippincott, (7th ed. 1966).
Sutherland, E., and Cressey, D., *Criminology*; J.B. Lippincott, (1970).

Tarantino, A. J., *Strategic Use of Scientific Evidence*; New York, Kluwer Law Book Publishers, (1988).

Taslitz, E. A., "Myself Alone: Individualizing Justice through Psychological Character Evidence"; *52 Maryland Law Review*, 1 – 120, (1993).

Taylor, Rt. Hon. Lord Taylor of Gosforth, Lord Chief Justice of England, "The Lund Lecture"; *Medicine, Science and the Law*, Volume 35, Number 1, 3 – 8, (January 1995).

Teten, H., "Offender Profiling", in B. William, (Eds.), *The Encyclopedia of Police Science*, 365 – 367, (1989).

Torres, N. A., Boccaccini, T. M., and Miller, A. H., "Perceptions of the Validity and Utility of Criminal Profiling Among Forensic Psychologists and Psychiatrists"; *Professional Psychology: Research and Practice*, Volume 37, Number 1, 51 – 58, (February 2006).

Tuerkheimer, F., "The Daubert Case and Its Aftermath: Shot-Gun Wedding of Technology and Law in the Supreme Court"; *51 Syracuse Law Review*, 803 – 840, (2001).

Turco, R., "Psychological Profiling"; *International Journal of Offender Therapy and Comparative Criminology*, Volume 34, 47 – 154, (1990).

Turvey, B., *Criminal Profiling: An Introduction to Behavioral Evidence Analysis*; San Diego, Academic Press, (1999)

Turvey, B., *Criminal Profiling: An Introduction to Behavioral Evidence Analysis*; San Diego, Academic Press, (2nd ed. 2002),

Uglow, S., *Evidence; Text and Materials*; London, Sweet and Maxwell, (1997).

Van Den Wyngaert, C., *Criminal Procedure Systems in the European Community;* London, Butterworths, (1993).

Vandiver, J., "Crime Profiling Shows Promise"; *Law and Order*, Volume 30, Number 10, 33 – 78, (1982).

Vold, B. G., *Theoretical Criminology*; New York; Oxford University Press, (1958).

Vorpagel, R. E., "Painting Psychological Profiles: Charlatanism, Coincidence, Charisma, Chance or New Science?; *Police Chief*, 156 – 159, (January 1982).

Waltz, R. J., and Park, C. R., Evidence: Cases and Materials; New York, Foundation Press, (10th ed. 2005).

Walsh, T. J., "Keeping the Gate: The Evolving Role of the Judiciary in Admitting Scientific Evidence"; *Judicature Genes and Justice*, Volume 83, Number 3, (Nov/Dec. 1999).

Ward, J., *Crime Busting: Breakthroughs in Forensic Science*; London, Blandford Press, (1998).

Warren, A. R., *The Effective Expert Witness*, Lightfoot, Virginia, Gaynor Publishing, (1997).

Wayne, C. B., Colomb, G. G., and Williams, M. J., *The Craft of Research*; Chicago, The University of Chicago Press, (1995).

Wecht, H. C., and Rago, T. J., (Eds.), *Forensic Science and Law: Investigative Applications in Criminal, Civil and Family Justice*; Boca Raton, CRC Press, (2006).

West, A., "Clinical Assessment of Homicide Offenders: The Significance of Crime Scene Analysis in Offence and Offender Analysis"; *4 Homicide Studies*, 219 – 233, (2000).

Weissenberger, G., 'The Supreme Court and the Interpretation of the Federal Rules of Evidence"; *53 Ohio State Law Journal*, 1307 – 1339, (1992).

Weissenberger, G., "The Elusive Identity of the Federal Rules of Evidence"; *40 William and Mary Law Review*, 1613 – 1622, (May 1999).

Weissenberger, G., "Evidence Myopia: The Failure to See the Federal Rules of Evidence as a Codification of the Common Law"; *40 William and Mary Law Review*, 1539 – 1593, (May 1999).

Weissenberger, G., *Weissenberger's Federal Evidence: 2007 Courtroom Manual*, New Jersey, LexisNexis/Mathew Bender, (2006).

Weissenberger, G., and Duane, J. J., *Weissenberger's Federal Evidence*; New Jersey, LexisNexis, (5th ed. 2006).

White, P., (Eds.), *Crime Scene to Court: The Essentials of Forensic Science*; The Royal Society of Chemistry, Cambridge, (1998).

Wigmore, J. H., Evidence in Trials at Common Law, Volume 7, revised by James H. Chadbourn, (1978)

Wigmore, J. H., *Wigmore on Evidence*; Little Brown and Company, (1983).

Wilson, P., and Soothhill, K., "Psychological Profiling: Red, Green or Amber?; *The Police Journal*, 12 – 20, (1996).

Wilson, P., Lincoln, R., and Kocsis, R., "Validity, Utility and Ethics of Profiling for Serial Violent and Sexual Offenders"; *Psychiatry, Psychology and Law*, Volume 4, Number 1, 1 – 12, (1997).

Winerman, L., "Does Profiling Really Work?; *Monitor on Psychology*, Volume 35, Number 7, 67, (July/August 2004).

Winslow, W. R., and Zhang, X. S., *Criminology: A Global Perspective*; New Jersey, Prentice Hall, (2007).

Woodhams, J., and Toye, K., "An Empirical Test of the Assumptions of Case Linkage and Offender Profiling with Serial Commercial Robberies"; *13 Psychology, Public Policy and Law*, 59 – 85, (February 2007).

Younger, I., Goldsmith, M., and Sonenshein, A. D., *Principles of Evidence*; Cincinnati, Anderson Publishing, (4th ed. 2000).