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James Alan Fox and Jack Levin

Multiple Homicide: Patterns of Serial and Mass Murder

ABSTRACT

Over the past decade the topic of multiple homicide—serial and mass murder—has attracted increased attention in the field of criminology. Though far from the epidemic suggested in media reports, it is alarming nonetheless that a small number of offenders account for so much human destruction and widespread fear. The serial killer is typically a white male in his late twenties or thirties who targets strangers encountered near his work or home. These killers tend to be sociopaths who satisfy personal needs by killing with physical force. Demographically similar to the serial killer, the mass murderer generally kills people he knows well, acting deliberately and methodically. He executes his victims in the most expedient way—with a firearm. Importantly, the difference of timing that distinguishes serial from mass murder may also obscure strong similarities in their motivation. Both can be understood within the same motivational typology—power, revenge, loyalty, profit, and terror. The research literature, still in its infancy, is more speculative than definitive, based primarily on anecdotal evidence rather than hard data. Future studies should make greater use of comparison groups and seek life-cycle explanations—beyond early childhood—which recognize the unique patterns and characteristics of multiple murderers. A research focus on murder in the extreme may also help us understand more commonplace forms of interpersonal violence.

From *Silence of the Lambs* to *Natural Born Killers*, Americans have been entertained and fascinated by the enigma of multiple homicide—the slaying of four or more victims, simultaneously or sequentially, by one

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or a few individuals attempting to satisfy personal desires, such as power, profit, revenge, sex, loyalty, or control. The forms that this extreme violence takes are wide-ranging (see Keeney and Heide 1995): from the sadist who stalks prostitutes in a red-light district to the hospital orderly who suffocates elderly patients with a pillow; from the schoolyard sniper to the disgruntled employee who resolves his workplace grievances with an AK-47; from the cult that abducts and kills strangers for the purpose of human sacrifice to the band of armed robbers who shoot and kill a roomful of witnesses to their crimes.

Although there remains some difference of opinion concerning the precise numerical standard to be used to define multiple homicide (see Lester 1995), we define it narrowly as the murder of at least four victims. More than just arbitrary, this minimum body count—as opposed to a two- or three-victim threshold suggested by others (e.g., Ressler, Burgess, and Douglas 1988)—helps to distinguish multiple killing from homicide generally. By restricting attention to acts committed by one or a few offenders, our working definition of multiple homicide also excludes highly organized or institutionalized killings (e.g., war crimes and large-scale acts of political terrorism as well as certain acts of highly organized crime rings). Although state-sponsored killings are important in their own right, they may be better explained through the theories and methods of political science than criminology. Thus, for example, our definition of multiple homicide would include the crimes committed by Charles Manson and his followers, but not those of Hitler's Third Reich. Similarly, the murderous activities of mob enforcers and hit men, while technically involving a series of killings, are perhaps better understood as a consequence of organizational demands rather than individual psychopathology.

Multiple homicide includes cases in which victims are slain either at once (mass), over a short period of time (spree), or over an extended period of time (serial). In this essay we strive to minimize the distinctions among the three subforms of multiple homicide, preferring to emphasize similarities in motivation rather than differences in timing. For the sake of avoiding confusion, however, we follow common practice in both the popular and professional literatures to classify and discuss mass and serial killings as distinct types. Nevertheless, our focus on motivation rather than timing eliminates the need for the “spree killer” designation—a category sometimes used to identify cases of multiple homicide that do not fit neatly into either the serial or mass murder types.

Until recently, criminologists have all but ignored multiple murder. Some may have regarded multiple murder as merely a special case of homicide, explainable by the same criminological theories applied to single-victim incidents, and therefore not deserving of special treatment. Others may have seen multiple homicide as largely a psychiatric phenomenon, perpetrated by individuals who suffer from profound mental disorders (e.g., psychosis) and, therefore, best understood as symptoms of extreme psychopathology. Finally, some criminologists may have assumed that such cases are not only rare but also aberrational enough to be unworthy of research attention.

In a review of the then-available literature, Busch and Cavanaugh (1986) suggested that quantitative studies were needed to draw valid conclusions about multiple murder. Yet their search through the literature produced only eleven clinical studies—nine of which were single case histories. Indeed, the psychiatric literature consists primarily of case studies and analyses of highly unrepresentative samples of multiple killers whose biographies are based on courtroom testimony and psychiatric interviews before trial; most of these psychiatric studies, furthermore, have focused on serial killings rather than on offenders who have committed massacres (see Berne 1950; Banay 1956; Galvin and Macdonald 1959; Kahn 1960; Bruch 1967; Evseeff and Wisniewski 1972; and Lunde 1976; by contrast, see Dietz 1986).

Over the past decade, however, the topic of multiple murder—and especially serial killing—has attracted increased interest in criminology. Although a long-standing concern among mental health professionals as well as journalists, the study of the causes and correlates of multiple homicide has only recently achieved some degree of respectability among crime scholars.

Since 1985, more than a dozen scholarly monographs and edited collections have been published on the topic (see, e.g., Levin and Fox 1985; Leyton 1986; Cameron and Frazer 1987; Holmes and DeBurger 1988; Norris 1988; Ressler et al. 1988; Keppel 1989; Egger 1990; Sears 1991; Segrave 1992; Wilson and Seaman 1992; Fox and Levin 1994a; Jenkins 1994; O'Reilly-Fleming 1996; and Hickey 1997). Not only has this burgeoning field been encouraged by massive media publicity surrounding particularly newsworthy cases, but this same news coverage has served as a primary data source (along with intensive, unstructured interviews with convicted offenders) for much of the research. As a result, most of the research on multiple killing has remained anecdotal and heavily qualitative in approach. Indeed, the ratio

of scholarly books to research articles is unusually high, reflecting an abundance of speculation and a paucity of hard data.

This essay attempts to bring together and demystify the research and theoretical literatures on serial and mass murder. Though far from reaching epidemic levels, the prevalence of multiple homicide is clearly enough to deserve the attention not just of journalists but also of scholars. Moreover, criminologists can learn much about more ordinary and commonplace forms of criminal violence by examining murder in the extreme.

In the pages to follow, we discuss the nature, prevalence, and causes of multiple homicide. Because of some important distinctions in offender profiles, it is useful for the sake of clarity to devote separate treatment to the two types of multiple killing—serial and mass murder. Section I examines the phenomenon of serial murder. In particular, we address the measurement of its prevalence and present a profile of serial murderers and their victims. Three major themes—power/control, state of mind, and apprehension strategies—are identified and discussed. Section II focuses on mass killings. After examining patterns of offending and victimization, we suggest a set of factors that are implicated in cases of mass murder. Because the distinction between serial and mass murder has been overemphasized at the expense of understanding, we present in Section III a unified typology for multiple murder based on motivation rather than timing. Section IV concludes with a discussion of certain perplexing issues of explanation and prediction common to both forms of multiple homicide.

I. Serial Murder

Serial murder involves a string of four or more homicides committed by one or a few perpetrators that spans a period of days, weeks, months, or even years. Although the most publicized and prominent form of serial killing consists of a power-hungry sadist who preys on strangers to satisfy sexual fantasies, the motivations for and patterns of serial homicide are quite diverse. Included within our definition of serial homicide are, for example, a nurse who poisons her patients in order to “play God,” a disturbed man who kills prostitutes to punish them for their sins, a team of armed robbers who execute store clerks after taking money from their cash registers, and a satanic cult whose members commit a string of human sacrifices as an initiation ritual.

Judging from the increasing number of criminologists who have recently become attracted to the study of serial murder (not to mention students hoping to pursue a career investigating such crimes), it might

seem that the United States is in the throes of an epidemic of serial homicide. Unfortunately, the scientific evidence to substantiate or deny the presence of such an upsurge is limited. Indeed, it is not possible to trace with a sufficient degree of precision or accuracy recent or long-term trends in the prevalence and incidence of serial murder in this country (see Egger 1990; Kiger 1990; Jenkins 1994).

In one of the most ambitious attempts to measure long-term trends, Hickey (1997) assembled an historical database extending back to 1800 of serial killers and their victims. Relying on various archival sources, he calculated victim and offender counts by quarter-century, showing a slowly rising trend (roughly following population growth) from 1800 through the 1960s. Since 1970, however, the number of cases has surged, reflecting nearly a tenfold increase during this period.

Hickey's trend results are clearly vulnerable, at least in part, to alternative explanations related to changes in data accessibility and quality of record keeping (as well as to a more general rise in violent crime, including homicide). As interest in serial murder has increased, so has the likelihood that case histories are published in some fashion. Additionally, as law enforcement has become better equipped to identify links between victims slain by the same killer or killers, the detection of serial crimes has become more likely.

Despite recent advances in technology and communication, however, law enforcement may still be unaware of the presence of many serial killers. In what Egger (1984) termed "linkage blindness," investigators are not always able to connect homicides, separated over time and space, to the activities of a single perpetrator, particularly murder sprees that cross jurisdictional boundaries (see Levin and Fox 1985). Nevertheless, there is agreement among experts in law enforcement and academia that serial murder has grown, at least on the basis of a rise in homicides committed by strangers and for unknown motive. According to the Uniform Crime Reports, for example, the percentage of murders committed by strangers or unidentified perpetrators increased from about 20 percent in 1964 to over 50 percent in 1994 (Federal Bureau of Investigation 1965, 1995).

Whatever the actual increase in the prevalence of serial murder in recent years, it is clear that fear associated with such crimes has grown. Prompted by exaggerated media reports (e.g., Darrach and Norris 1984), the American public has been scared into believing that there is an epidemic of serial murder in the United States, totaling as many as 5,000 victims annually.

This grossly distorted estimate is not restricted to the popular press. Many academic researchers also accepted the 5,000 benchmark, at least initially. Although he has since modified his view (in Egger 1990), Egger (1984) placed the annual number of serial murder victims in the 4,000–6,000 range. Holmes and De Burger (1988) also estimated that between 3,500 and 5,000 victims are murdered each year by serial killers.

A close assessment of the reasoning behind the often-cited annual estimate of 3,500–5,000 victims exposes a fatal semantic flaw. Each year in the United States, there are approximately 5,000 homicides with unknown motive (i.e., the “unknown circumstance” code from the FBI’s Supplementary Homicide Reports, an incident-based compilation of homicide victim and offender age, race, sex, weapon, victim/offender relationship, and circumstance). Moreover, serial murder is popularly known as “murder for no apparent motive” or “motiveless” (Ressler et al. 1984). At some juncture, “unknown motive” was equated and confused with “no motive,” leading to the erroneous inference that serial murder claims 5,000 victims per year (see Fox and Levin 1985; Jenkins 1988, 1994). Even when the flawed reasoning was uncovered, there remained a tendency to inflate uncritically the extent of the serial murder problem. When asked how many of the 5,000 homicides with unknown motives could be the work of serial killers, Justice Department sources speculated it to be two-thirds of the 5,000, or approximately 3,500 (Starr 1984).

In contrast to the Justice Department’s early estimate of thousands of victims annually, Hickey (1997) enumerated only 2,526–3,860 victims slain by 399 serial killers between the years 1800 and 1995, and 974–1,398 victims in 1975 to 1995, which is 49–70 per year. This significant discrepancy—the FBI’s thousands per year as opposed to Hickey’s dozens per year—may reflect more than just the difference between estimating and enumerating; nor can it be dismissed as the result merely of definitional inconsistency or methodological dissimilarity. More likely, according to Kiger (1990) and Jenkins (1994), organizational vested interests were at least partially responsible for the gross exaggeration in the “official” estimates of the prevalence of serial murder. That is, congressional approval of expenditures for FBI initiatives related to serial homicide may have depended, at least in part, on establishing a convincing case that the problem had reached alarming proportions.

A. Profile of Serial Killers

Virtually every book surveying the topic of serial murder devotes considerable attention to Theodore Bundy, giving the impression that he is the perfect "case study." Bundy was the handsome and well-spoken law student who brutally killed dozens of women from Washington to Florida in the mid-1970s. While his attractiveness, charm, and intelligence may be important in understanding his keen ability to lure victims and elude the police for years (see Rule 1980), Bundy is more the exception than the rule. At the other end of the spectrum are serial killers who are high school dropouts and some who are quite unattractive by conventional standards. Most, however, are fairly average, at least to the casual observer. Contrary to the popular stereotype, serial killers tend in many respects to be "extraordinarily ordinary" (Levin and Fox 1985).

Despite these wide-ranging differences, there is one trait that appears to separate serial killers from the norm: many are exceptionally skillful in their presentation of self so that they are beyond suspicion and thus are difficult to apprehend. While they span a broad range of human attributes including appearance, intelligence, and social class, serial killers tend to share some traits in common—typically a white male in his late twenties or thirties who targets strangers at or near his place of residence or work. According to Hickey (1997), whose historical database includes the demography of serial murder, 84 percent of the serial killers were male, 20 percent were black, and the average age at which they first committed murder was 27.5.

The disproportionate involvement of males in part reflects, of course, their greater numbers in murder rates generally. Curiously, however, according to Hickey's statistics, the gender ratio among serial killers (84 percent male) is slightly *less* pronounced than for murder generally (about 90 percent), a finding that is at odds with the prevailing view among most researchers that almost all serial killers are men (e.g., Holmes and DeBurger 1988).

This seeming discrepancy can, however, be understood as a difference in definition. While Hickey defines serial homicide in the broadest terms to encompass any personal motive for repeated homicide (including profit, revenge, dominance), others (e.g., Ressler, Burgess, and Douglas 1988) restrict their attention almost exclusively to sexually motivated killers, virtually all of whom are men.

The percentage of serial killers who are black (20 percent) is roughly

the same as their representation in the general population, and considerably below the substantial percentage of blacks among single-victim killers (more than half). However, the involvement of black serial killers may be understated proportionately as a consequence of racially disparate linkage blindness. Serial murder, like murder generally, tends to be intraracial; serial killings of black victims, especially those who are impoverished and marginalized politically, are less likely to be connected, prioritized for investigation, and subsequently solved.

One of the most striking dissimilarities between serial murder and criminal homicide generally is the nature of the victim-offender relationship. Unlike single-victim murder, which commonly arises from some dispute between partners, family members, or friends (only about one-quarter of solved murder cases involve strangers; see Federal Bureau of Investigation 1996), serial murder is typically a stranger-perpetrated crime (see also Riedel 1993). According to Hickey (1997), 61 percent of serial killers targeted strangers exclusively, and another 15 percent killed at least one stranger among their lists of victims. The unusually large share of stranger-perpetrated crimes in serial homicide may reflect more than just the killer's tendencies for victim selection. A more practical issue related to apprehension may also be involved. Because stranger-crimes are far more difficult to solve, those killers who target victims known to them are less likely to remain at large long enough to accumulate a victim count that satisfies the definition of serial murder.

One of the most striking contrasts between male and female serial killers—aside from the grossly uneven prevalence of male killers—involves the relationships or lack thereof between the killer and his or her victims. Overwhelmingly, male serial killers prey on strangers whom they select on the basis of some sexual fantasy involving capture and control. Female serial killers, by contrast, generally kill victims with whom they have shared some kind of relationship, most often in which the victim is dependent on them. Gwendolyn Graham and Catherine Wood of Grand Rapids, Michigan, suffocated to death at least six nursing home patients under their care. At the extreme, Marybeth Tinning of Schenectady, New York, killed nine of her own children, not all at once in a murderous fit or rage, but one at a time in a cold, deliberate, and selfish attempt to win attention. One of the very few female serial killers to target strangers was Aileen Wuornos, a Florida prostitute who murdered seven middle-aged “johns” in 1989–90. Erroneously labeled by the press as the “first female serial killer,”

Wuornos was indeed exceptional only in her victim selection and modus operandi—her style of killing closely resembled that of a predatory male serial killer.

Another well-studied pattern of serial murder is its geographic location (see Rossmo 1996). In the modern mythology of serial murder, the killer is characterized as a nomad whose killing spree takes him hundreds of thousands of miles a year as he drifts from state to state and region to region leaving scores of victims in his wake. This may be true of some well-known and well-traveled killers like Theodore Bundy, but not for the majority (Levin and Fox 1985). According to Hickey's (1997) data, 14 percent of the killers operated in a specific location (e.g., at their home or workplace), and another 52 percent confined their murder sprees to the same general location or area (e.g., a city or state). Only 34 percent traveled wide distances, in a nomadic fashion, to commit their crimes. The prevalence of mobile serial killers may be especially attenuated, however, as a result of linkage blindness. That is, law enforcement authorities are less likely to identify connections between homicides that are widely dispersed and cross jurisdictional lines (Egger 1984, 1990).

B. Power and Control

While the range of motives for serial homicide is quite broad, research on this topic has focused heavily on issues of power and control—the thrill, sexual satisfaction, or dominance that serial killers achieve by controlling the lives and the deaths of their victims (Skrapac 1996). For these killers, murder is a form of expressive, rather than instrumental, violence. Not only do they savor the act of murder itself, but they rejoice as their victims scream and beg for mercy. They tie up their victims in order to watch them squirm; they rape, mutilate, sodomize, and degrade their victims in order to feel superior.

As another expression of their need for power and quest for control, serial killers often crave the publicity given to their crimes (Dietz 1986). They desire to make the headlines and realize that sensational murders draw a good deal of media attention. Yet it is not just the celebrity status that they enjoy; more important, they are able to manipulate the lives of thousands of area residents who are held in their grip of terror. We do not suggest that serial killers turn to homicide primarily as an attention-getting move, merely that the media hype is a significant fringe benefit that many of them enjoy. Still other serial

killers exaggerate the scope of their crimes to attract the television cameras and front-page coverage.

Unlike most other types of murderers (including mass murderers), the serial killer hardly ever uses a firearm (Hazelwood and Douglas 1980). According to Hickey (1997), only 19 percent of male and 8 percent of female serial killers murder exclusively with a firearm, although others sometimes use a gun as a secondary weapon to intimidate and control their victims. Hickey's figures, moreover, include profit-motivated crimes in which a firearm is frequently the weapon of choice. In control-motivated cases, by contrast, a firearm would only distance the killer from his victims, depriving him of the chance to take an active part in producing their suffering and misery. Among a sample of twenty serial killers motivated by sexual sadism, only one killed with a gun, compared to six who used a knife and twelve who strangled their victims (Warren, Hazelwood, and Dietz 1996).

A sexual sadist derives pleasure through inflicting physical or psychological suffering, including humiliation, on another human being (American Psychiatric Association 1994). Hazelwood, Warren, and Dietz (1993) argue that the essence of the sadistic drive lies in the desire to achieve total domination and mastery over another person. From this point of view, the pleasure derived from killing depends, at least in part, on the sadist's role in having caused the victim to suffer. According to a related view (Hazelwood, Dietz, and Warren 1992), however, the sexual or psychological pleasure that a sadistic killer derives from the act of torturing his victim may be more a result of observing the victim's agony than of the actual infliction of pain. This hypothesis would appear to be supported by experimental research in which aggressive sex offenders become sexually aroused when shown simulated scenes of men inflicting pain against women (e.g., Fedora, Reddon, and Morrison 1992). This begs the question, however, of whether the arousal stems from observing the victim's suffering or from identifying vicariously with the aggressor.

Regardless of whether the critical component is the stimulus (the direct infliction of pain) or the response (the victim's suffering itself), the fundamental objective in the actions of the sadistic serial killer is to achieve complete mastery over his victims. In other words, humiliation, enslavement, and terror are vehicles for attaining total domination over another human being.

Inspired to disregard both law and convention, serial killers tend to have particularly detailed and elaborate fantasies—"scripts of vio-

lence," rich with themes of dominance (Skrapec 1996). These fantasies tend to span every detail of the imagined criminal act, including the capture of a victim, the infliction of extreme pain and suffering, the murder, and disposal of the body (Hazelwood, Dietz, and Warren 1992). For example, in a sample of twenty sexually sadistic serial killers analyzed by Warren, Hazelwood, and Dietz (1996), 80 percent reported having violent fantasies.

Prentky, Burgess, and Rokous (1989) found significant differences in the strength of fantasy life between samples of twenty-five multiple and seventeen single-victim murderers. Only 23 percent of the single-victim murderers, but as many as 86 percent of the serial killers, reported having violent fantasies on a regular basis.

Through murder and mayhem, therefore, the sexually motivated serial killer literally chases his dreams. With each successive victim, he attempts to fine-tune the act. Through what Prentky, Burgess, and Rokous (1989) call "trial runs," the killer strives to make his real-life experiences as perfect as his fantasy. But because the trial run can never match the fantasy exactly, the killer repeatedly needs to stage his fantasy with another victim.

The killer's unfulfilled aspirations may reflect more than just his inability to replicate his fantasy in real life. The fantasy itself may not represent merely a static goal. As his crimes become more vicious and barbaric over time, the serial killer's mental script can become more demanding. Not only is his behavior driven by fantasy, but the fantasy itself is altered and reinforced through the offenses that he has committed. As a result, the killer's crimes can increase in severity as he constantly updates his fantasy in a never-ending spiral of image and action (Fox and Levin 1994a).

Not all fantasy life is pathological, of course. Ordinary, healthy human beings often dream about their hopes and pleasures, even those that are beyond their reach. Some of the fantasies may even include deviant and bizarre sexual practices, such as fetishes, pedophilia, bondage, and rape. Because of their strong sense of conscience, social ties, or concern for their public image, most people can resist translating desire for sexual violence into action. In fact, fantasies can function as a useful outlet for those urges that are viewed as socially deviant or unacceptable as well as an innocuous means of discharging anger (Kaplan 1979).

In contrast, serial killers, consistent with their violent fantasies, typically collect hard-core pornography, often containing themes of vio-

lence, dominance, and bondage. Undoubtedly, this preoccupation plays an important role in the fantasy life of the killer, even providing him with examples to enrich his own imagination. According to FBI researchers, for example, 81 percent of the thirty-one sexual predators they interviewed reported an active interest in violent pornography (Ressler, Burgess, and Douglas 1988). Indeed, when police search the home of a suspected serial killer, they often uncover extensive libraries of films and tapes that depict acts of rape and murder (Fox and Levin 1994a). John Wayne Gacy, for example, a man who killed and buried thirty-three young men and boys in his suburban Chicago home, owned a large collection of pornographic videotapes; Leonard Lake and Charles Ng, who together tortured and killed at least twenty-five victims in rural Northern California, produced homemade "snuff" films that portrayed their torture victims in "starring" roles.

The connection between violent pornography and serial murder would appear to be generalizable from experimental research showing that a steady diet of violent pornography causes male subjects to be more aggressive, sexually aroused, and desensitized to the plight of victims of sexual assault (see Malamuth and Donnerstein 1984). Moreover, Malamuth and Donnerstein (1984, p. 40) suggest that the research literature "strongly supports the assertion that the mass media can contribute to a cultural climate that is more accepting of aggression against women."

The critical question, however, is whether pornography *directly* operates as a drive mechanism for murder—that is, does an interest in violent sexual films and photos cause or merely reflect the serial killer's fascination with murder? The problems of distinguishing cause from effect have long plagued behavioral researchers eager to understand the development of violent impulses. Not surprisingly, people who are, for whatever reason, predisposed to violence will be drawn to violent pornography. This does not necessarily mean that the pornography created their predisposition toward violence, although it may reinforce or exacerbate it. It may also tend to desensitize viewers to the pain and suffering of real-life victims of sexual violence.

Also supporting their fantasies of violence, many serial killers collect memorabilia or souvenirs—not just news clips, but diaries, clothing, photos, even body parts belonging to their victims. In their study of twenty sexually sadistic serial killers, Warren, Hazelwood, and Dietz (1996) found that thirteen collected trophies and nine recorded their crimes by various means. California serial killer Randy Kraft, for exam-

ple, chronicled his murderous roadside assaults on dozens of young men in gruesome photographs and kept an up-to-date written record of his crimes. Danny Rolling, who in 1991 butchered five young college students in Gainesville, Florida, removed and kept the nipples of some of his female victims (Fox and Levin 1994a, 1996).

Even though they sometimes become incriminating evidence in court, the mementos collected by a serial killer may serve several important purposes. First, for a man who has otherwise led an unremarkable life, his "treasures" make him feel proud. They represent the one and only way in which he may have ever distinguished himself. More important, these souvenirs can become tangible reminders of the "good times" spent with his victims. Aided by the various items taken from a crime scene, he can still get pleasure, between crimes, by reminiscing, fantasizing, and masturbating (Hazelwood and Douglas 1980).

C. State of Mind

Responding to Hollywood portrayals of bizarre serial killers in films from Hitchcock's *Psycho* to *Silence of the Lambs* (see Jenkins 1994), lay people often assume that anyone who kills for the thrill, pleasure, or power must be "crazy." Curiously, both of these films (as well as others) were loosely based on the actual, but highly atypical, case of Edward Gein of Plainfield, Wisconsin. In the early 1950s, Gein killed and cannibalized his neighbors, robbed local graves for body parts, and decorated himself and his farmhouse with the skin and bones of his victims.

Similarly, the prevailing view in psychiatry was, until recently, that such offenders were deeply disturbed and legally insane (see, e.g., Guttmacher 1960; Abrahamsen 1973; Lunde 1976). Some serial killers have been driven by psychosis—such as Herbert Mullen of Santa Cruz, California, who in 1972 killed at least ten people, obeying imaginary voices that ordered him to make human sacrifices to avert an earthquake.

With a few notable exceptions, however, most serial killers do not suffer from a profound mental disorder, such as schizophrenia (see Levin and Fox 1985; Leyton 1986). For example, only one of twenty sexually sadistic serial killers studied by Warren, Hazelwood, and Dietz (1996) was psychotic. In a legal sense, moreover, most serial murderers are neither delusional nor confused; they understand the difference between right and wrong, and know the nature and quality of their criminal acts. Despite the power of their fantasies and their strong desire to

dominate, they are capable of controlling their impulse to kill but choose not to do so.

According to most researchers, the serial killer is a sociopath (or antisocial personality), which reflects a disorder of character or personality rather than of the mind (e.g., Holmes and DeBurger 1988; Sears 1991; American Psychiatric Association 1994; Holmes and Homes 1996; Hickey 1997). He lacks a conscience, feels no remorse, and cares exclusively for his own pleasures in life. Other people are seen merely as tools to fulfill his own needs and desires, no matter how perverse or reprehensible (see Harrington 1972; Magid and McKelvey 1988).

Typical of the sociopathic personality, Texas drifter Henry Lee Lucas, whose prolonged killing spree spanned a number of states, was devoid of any feelings or concern for his victims. Lucas talked, without emotion, of killing someone just because they were around and he decided that it might be fun. "Killing someone is just like walking outdoors," explained Lucas. "If I wanted a victim, I'd just go get one" (Jeffers 1991, p. 45).

The widely accepted conception of the sociopathic serial killer may fit the moral immaturity found in violent offenders like Henry Lee Lucas. In many other cases, however, sociopathy may not be present, at least in such a pure form. The behavior of many serial killers—their apparent loyalty and concern for family and friends, even as they torture and murder total strangers—has prompted some researchers to reconsider the absolutist view that serial killers are classic sociopaths who lack any capacity for empathy or remorse. Even the American Psychiatric Association has eliminated from its most recent symptomological definition of "antisocial personality disorder" the characteristics of being a chronically unfaithful mate and an irresponsible parent (American Psychiatric Association 1994). Thus, a sociopath may very well be unreliable and negligent in conducting his family relationships, but not necessarily so.

As an alternative to the antisocial personality diagnosis, Ansevics and Doweiko (1991) suggest that many serial killers appear to suffer from a related character abnormality called "borderline personality disorder," which is marked by a pattern of instability in mood, relationships, and self-image (see American Psychiatric Association 1994). In response to a stressful situation, the borderline type may become "pseudopsychotic" for a short period. The behavior of individuals with the borderline personality syndrome often includes impulsivity, intense anger, and chronic feelings of boredom. They often feel a profound sense of

abandonment and rejection and may be extremely manipulative with other people. Unlike the sociopath, however, the borderline personality type is capable of feeling remorse and empathy when he or she hurts other people (American Psychiatric Association 1994).

The borderline personality disorder may help to explain impulsive attacks of some serial killers who repeatedly murder in a state of frenzy without making much of an effort to plan the crime or cover their tracks. Though not genuinely psychotic, they nevertheless kill in a state of confusion and anger; when not killing, they have the capacity for empathy and compassion. Because of their confusion and impulsivity, they are generally discovered and apprehended before amassing a high victim count.

Despite the merits of their argument, Ansevics and Doweiko appear to overstate the role of the borderline personality among serial killers. Given the care and planning with which they kill, most serial killers are organized both in the way they approach and leave the crime scene (see Ressler, Burgess, and Douglas 1988) and do not possess the pattern of unstable mood and impulsivity that characterizes the borderline personality type.

Whether or not they exhibit characteristics of the borderline personality, many serial killers may still not be classic sociopaths. Instead, many seem to possess powerful psychological facilitators for neutralizing whatever pangs of guilt might otherwise plague them. Some killers are able to compartmentalize their attitudes toward people by conceiving of at least two categories of human beings—those whom they care about and treat with decency, and those with whom they have no relationship and therefore can victimize with total disregard for their feelings. Sociopaths may choose a wide range of victims—strangers and intimates, friends and relatives—based on criteria other than a desire to avoid feelings of remorse. Serial killers who compartmentalize may, by contrast, select within a narrow range of victims with whom they have had no previous relationship, such as only prostitutes, only hitch-hikers, or only abducted children.

Compartmentalization seems to play an important role in fostering other forms of atrocity as well. According to Lifton (1986), the Nazi physicians who conducted gruesome experiments in concentration camps were able to compartmentalize their behavior and emotions through what he calls “doubling.” That is, any possible feelings of guilt were minimized because the camp doctors developed two separate and distinct selves—one for doing the dirty work of experimenting

with and exterminating inmates, and the other for living the rest of their lives outside of the camp. In this way, no matter how sadistic they were on the job, they were still able to see themselves as decent husbands, caring fathers, and honorable physicians.

The compartmentalization that allows for killing without guilt is actually an extension of an ordinary phenomenon used by normal people who play multiple roles in their everyday lives. An executive might be heartless and demanding to all his employees at work but be a loving and devoted family man at home. Similarly, many serial killers have jobs and families, do volunteer work, and kill part-time with a great deal of selectivity. Even the cruelest sexual sadist who may be unmercifully brutal to a hitchhiker or a stranger he meets at a bar might not ever consider hurting family members, friends, or neighbors. The evidence is anecdotal but compelling. Serial killer John Wayne Gacy, who killed thirty-three young men in suburban Chicago, owned a successful contracting company, lived with his wife in a middle-class suburban home, entertained children by dressing as a clown, and was a helpful and gregarious neighbor. Similarly, the Hillside Strangler Kenneth Bianchi, who was responsible for the murders of twelve women in southern California and Washington State, lived with his common-law wife and son, was a member of the sheriff's reserve, and had studied law enforcement in college.

It is difficult to determine with certainty whether any particular serial killer psychologically separates those in his "inner circle" from the rest of humanity or whether he is just a clever sociopath who successfully plays the role of a loving friend and family member. Although sociopaths lack the capacity for humankindness and compassion, they know the socially acceptable way to behave. They are often very skillful at maintaining a caring and sympathetic facade, especially when it is in their self-interest to do so. In analyzing a particular case, investigators are frequently left with an unanswered question: Could a serial killer have fooled his wife, his children, and his neighbors, or is it possible that those within his acquaintance know more about his character than those of us who have analyzed his criminal behavior?

In addition to compartmentalization, serial killers who possess a conscience may also be aided by the process of dehumanization, a psychological process that effectively permits killing without feeling guilty. During times of war, soldiers in their preparation for combat frequently come to regard the enemy forces in subhuman terms, for example, as merely "Gooks," "Japs," or "Krauts" (Keen 1986). In the

same way, not only did the Auschwitz physicians compartmentalize their roles by constructing separate selves, but they were able to convince themselves that their research subjects, their victims, were something less than human. The Jews were seen as a disease or plague that had to be stamped out for the health of the Fatherland. And it was more than just a metaphor; the inmates were actually regarded as vermin in semihuman form who had to be exterminated. Likewise, Jewish research subjects were truly viewed as guinea pigs who could be sacrificed for the sake of medical knowledge. Thus, by a process of dehumanization, concentration camp doctors made decisions as to who would live and who would die and conducted twin studies in which inmates were forced to experience excruciating pain and suffering, all in the name of science (Lifton 1986).

Through essentially the same process of dehumanization, many serial killers have slaughtered innocent people by viewing them as worthless and, therefore, expendable. Thus, prostitutes are seen as mere "sex machines," gays as AIDS carriers, nursing home patients as "vegetables," and homeless alcoholics as nothing more than trash. By regarding their victims as subhuman elements of society, the killers can actually delude themselves into believing that they are doing something positive rather than negative. From their point of view, they are cleaning the streets of filth or ridding the world of evil (Holmes and Holmes 1996; for a related view, see Sykes and Matza 1957).

After his capture, the behavior of a serial killer can provide some insight into his level of conscience. Consistent with their tendency to deny responsibility, genuine sociopaths, like Theodore Bundy and John Wayne Gacy, would generally not confess after being apprehended, unless they believe they can benefit from doing so (e.g., gain publicity or a reduced sentence). They are likely to maintain their innocence, even in the face of overwhelming evidence implicating them, always expecting to be freed on a technicality, to be granted a new trial, or to appeal their case to a higher level.

The theory of dehumanization can be extended to speculate about why some serial killers freely confess once in custody. Unlike true sociopaths who are incapable of feeling remorse, serial killers who must dehumanize their victims can for just so long maintain the myth that their victims deserved to die. After being apprehended, they may be forced to confront the disturbing reality that they have killed human beings, not animals or objects. They may see for the first time the tremendous pain and suffering experienced by the families of their victims. At this point,

we suggest, their victims are rehumanized in their eyes. As a result, these serial killers may be overcome with guilt for all the horrible crimes they committed and willingly confess, as Milwaukee's Jeffrey Dahmer did during his courtroom apology to the families of the seventeen victims he had murdered, lobotomized, subjected to necrophilia, and cannibalized.

D. Profile of Victims

According to available data, the victims of serial killers tend to be white, female, and very young or very old (see Warren, Hazelwood, and Dietz 1996; Hickey 1997). This victim profile is particularly representative of sexually motivated killers. Male and minority victims are, however, more likely to be slain by killers motivated by profit (e.g., a string of convenience store robberies) or by certain sexual predators who specifically seek out victims who are gay males or blacks of either gender.

Beyond demographics, serial killers typically prey on the most vulnerable targets—prostitutes, drug users, hitchhikers, children, elderly hospital patients (Levin and Fox 1985). Part of the vulnerability concerns the ease with which victims can be abducted or overtaken. Children and the elderly are relatively defenseless because of their physical stature or disability; hitchhikers and prostitutes become vulnerable as soon as they enter the killer's car or van; hospital patients are vulnerable in their total dependency on their caretakers. Vulnerability is most acute in the case of prostitutes, which explains their extremely high rate of victimization by serial killers. A sexual sadist can cruise a red-light district, trolling for the woman who best fits his deadly sexual fantasies. When he finds her, she willingly gets into the killer's car and is completely at his mercy. Even when it is well known that a killer is prowling the streets in search of victims, far too many prostitutes place profit above protection, erroneously believing that they can fend for themselves.

Another aspect of vulnerability is the ease with which the killers can avoid being detected following a murder, especially when their victims are lacking in connections with the local community and are expected to be on the move. Because the disappearance of a prostitute is more likely to be treated, at least initially, as a missing person rather than a victim of homicide, the search for her body can be delayed weeks or months. In many cases, the discovery of mere skeletal remains makes it difficult to identify the victim, much less her killer. Finally, potential witnesses to abductions in red-light districts, having a deep-seated dis-

trust for the police, tend to be unreliable or uncooperative sources of information. These problems help to explain why prostitute slayings in many parts of the country remain unsolved. Most strikingly, the so-called Green River killer murdered as many as four dozen prostitutes in and around Seattle between 1982 and 1984, leaving the police with little more than the skeletal remains of his victims. In 1988, eleven women known to be involved with prostitution and illicit drug use disappeared in New Bedford, Massachusetts; the slow response of the authorities made the case difficult, if not impossible, to solve.

Patients in hospitals and nursing homes represent a class of victims who are at the mercy of a different kind of serial killer. Known as "angels of death," these murderous caretakers take advantage of the frailty and dependence of their bedridden victims by suffocating them or adding poison to their intravenous tubes. For example, in 1987, hospital orderly Donald Harvey confessed to poisoning to death as many as sixty patients, most of them elderly, over a period of years in a number of Cincinnati area institutions. In 1981, administrators at the Bexar County Hospital in San Antonio, Texas, were alarmed by the mysterious deaths of twenty infants in the pediatric intensive care unit; many of these deaths occurred under the care of the nurse Genene Jones, who was subsequently convicted of murder.

Hospital homicides like these are particularly difficult to detect and solve. First, death among patients, especially elderly patients, is not uncommon, and so suspicions are rarely aroused. Furthermore, should a curiously large number of deaths occur within a short time span on a particular nurse's shift, hospital administrators feel they are in a predicament. Not only are they reluctant to bring scandal and perhaps lawsuits to their own facility without sufficient proof, but most of the potentially incriminating evidence against a suspected employee is long-buried.

E. Apprehension of Serial Killers

Many serial killings remain unsolved, but not necessarily because of police ineptitude or lack of effort. These cases are simply the greatest challenge for law enforcement. There is an element of self-selection in serial killing. Only those with sufficient cunning to kill and get away with it are able to avoid apprehension long enough to amass the victims necessary to be classified as a serial killer. Most serial killers are careful, clever, and, to use the FBI's typology, "organized" (Ressler, Burgess, and Douglas 1988). At the extreme, the Unabomber (the re-

cently convicted Theodore Kaczynski), was careful to cover his tracks for nearly two decades, despite a massive task force investigating his bombings.

Murders committed by a serial killer are also difficult to solve because they typically lack either motive or evidence. Unlike the usual homicide, which involves an offender and victim who know one another, serial murders—particularly those committed by sexual predators—overwhelmingly involve strangers. Thus, the usual police strategy of identifying suspects by considering their possible motive, be it jealousy by an estranged lover or revenge by an angry neighbor, generally does not apply. Even in caretaker killings, the lack of a clear-cut motive makes these crimes difficult to solve.

Another conventional approach to investigating homicides involves gathering forensic evidence—fibers, hairs, blood, and fingerprints—from the scene of the crime. In the case of many serial murders, however, this is generally difficult, if not impossible. The bodies of the victims are often found at dump sites, such as desolate roadsides or makeshift graves, miles away from the crime scene. Most of the potentially revealing crime scene evidence remains in the killer's house or car where the victim was slain, but without a suspect, the police do not know its location (Douglas and Munn 1992). Some trace evidence, such as intravaginal semen and skin beneath the fingernails, does stay with the victim's body when it is transported to a dump site. If the body remains exposed to rain, wind, and snow, however, these physical specimens can quickly erode.

Even when the police have a crime scene to search, serial killings are relatively difficult to solve. In all likelihood, it is a myth that serial murderers secretly yearn to be caught and thus subconsciously leave clues behind to speed up their apprehension. To the contrary, serial killers generally do everything within their power to avoid being apprehended. Through self-selection as well as through experience, they are particularly adroit at cleaning up after their crimes.

Part of the difficulty for investigators is that the killer does not always leave unmistakable and unique signatures at his crime scenes. As a result, the police may not recognize multiple homicides as the work of the same perpetrator. Moreover, some serial killings, even if consistent in style, traverse jurisdictional boundaries. Thus, “linkage blindness” is a significant barrier to solving many cases of serial murder (Douglas and Munn 1992).

To aid in the detection of serial murder cases, the FBI established

in 1985 the Violent Criminal Apprehension Program (VICAP). This program uses a computerized database for the collection and collation of information pertaining to unsolved and extraordinary homicides, sex crimes, and disappearances around the country. Through a lengthy questionnaire completed by local police investigators, VICAP analysts assess victim characteristics, elements of modus operandi, crime scene attributes, and available offender information, attempting to flag similarities in unsolved cases that might otherwise be obscured (Howlett, Hanfland, and Ressler 1986; Douglas and Munn 1992).

While an excellent concept in theory, VICAP has encountered significant practical limitations since its inception. First, primarily because of complexities in the data collection forms, cooperation from local law enforcement in completing VICAP questionnaires has been less than satisfactory. With incomplete data, VICAP has not been capable of reaching its potential. In addition, pattern recognition is not as easy as some might believe, regardless of how powerful the computer, sophisticated the software, or skillful the crime analyst. Finally, VICAP is actually a misnomer, being a detection rather than an apprehension device. That is, even if a pattern emerges among several records in the database, that hardly ensures that the offender will be identified. Despite these limitations, over the years, the FBI has attempted to upgrade the VICAP software and to streamline the VICAP form. As a result, assistance from VICAP has helped local authorities to solve a number of perplexing serial crimes.

In addition to the VICAP clearinghouse, the FBI provides technical assistance to local law enforcement in attempting to solve open cases of suspected serial murder. The FBI, through its crime laboratory, performs forensic tests on its state-of-the-art technology. Of particular relevance to serial murder investigations, the FBI, on request, assembles profiles of the unknown killers based on behavioral clues left at crime scenes as well as autopsy, crime lab, and police investigative reports. Typically, these profiles speculate on the killer's age, race, sex, marital status, employment status, sexual maturity, possible criminal record, relationship to the victim, and likelihood of committing future crimes.

The FBI has done more to advance the art and science of offender profiling than any other organization or group of specialists. At the core of its criminal profiling theory, the FBI years ago distinguished between "organized nonsocial" and "disorganized asocial" killers (Hazelwood and Douglas 1980). Based on an FBI study of thirty-six killers,

twenty-five serial and eleven nonserial (Ressler and Burgess 1985), the organized killer typically is intelligent, socially and sexually competent, of high birth order, a skilled worker, mobile, lives with a partner, drives a late model car, and follows his crime in the media, whereas the disorganized killer generally is less intelligent, socially and sexually inadequate, of low birth order, an unskilled worker, nonmobile, lives alone, drives an old car or no car at all, and has minimal interest in the news reports of his crimes.

According to the FBI analysis, these polar types tend to differ in terms of crime scene characteristics and overall modus operandi. Specifically, the organized killer uses restraints on his victims, hides or transports the body, removes weapons from the scene, molests the victim prior to death, and is methodical in style of killing. In contrast, the disorganized killer tends not to use restraints, leaves the body in full view, leaves a weapon at the scene, molests the victim after death, and is spontaneous in his manner of killing. Though few killers are perfect prototypes at either end, the organized/disorganized continuum is used as an overall guideline for drawing inferences from the crime scene to the behavioral characteristics of the killer. At a conceptual level, the fact that most cases contain elements of both organized and disorganized types is not a problem; in practical applications of profiling, however, the organized/disorganized distinction becomes less useful, for a number of reasons.

The profiles are intended as a tool to focus on a range of suspects rather than to point precisely to a particular suspect. Even in meeting this limited objective, the profiles are not always successful.

First, behavioral inferences from the crime scene cannot be made with substantial reliability. An FBI reliability study (Ressler and Burgess 1985) revealed a 74 percent agreement rate in classifying crime scenes as organized or disorganized. While this may seem impressive on the surface, it is actually deficient in view of the base rate of organized killers in the sample. Of sixty-four crime scenes classified in the FBI reliability study, thirty-one were organized and twenty-one disorganized, while nine were mixed and three indeterminable. Thus, the 74 percent agreement rate is not much better than a fixed "organized" response.

More to the point, the profiles have a very low rate of success in leading to the identity of a killer (see Federal Bureau of Investigation 1981; Levin and Fox 1985; Egger 1990). They are typically vague and general in characterizing an unidentified assailant and on occasion in-

clude details of a misleading nature. Thus, while profiles work wonderfully in fiction, they are much less than a panacea in real life, even when constructed by the most experienced and skillful profilers like those at the FBI unit (Pinizzotto and Finkel 1990). Nevertheless, profiles are not designed to solve a case but simply to provide an additional set of clues in cases found by local police to be unsolvable. Moreover, one should not expect a high success rate in any event; only the most difficult and "insolvable" cases ever reach the attention of the FBI profiling unit.

It is critical, therefore, that we maintain some perspective on the investigative value of criminal personality profiles. Simply put, a profile cannot identify a suspect for investigation, nor can it eliminate a suspect who does not fit "the mold." Rather, a profile can assist in assigning subjective probabilities to suspects whose names surface through more usual investigative strategies (e.g., interviews of witnesses, canvassing of neighborhoods, and "tip" phone lines).

A newer approach to identifying serial killers uses the geographic patterns of their crimes. Since serial killers typically operate in "comfort zones," areas close to home or work with which they are familiar, spatial analysis of crime scene locations and dump sites can potentially uncover possible home bases for the perpetrator. Rossmo (1996) has demonstrated various geomapping procedures applicable to the investigation of serial homicides.

While forensic investigation, criminal profiling, VICAP, and spatial analysis all play important roles, there is no substitute for old-fashioned detective work and a healthy dose of luck. Serial killers may be unusually adroit at murder. However, given the repetitiveness of their crimes as well as their tendency to feel invincible, they often make careless mistakes in carrying out their murders; it is critical that police investigators be vigilant and informed in order to capitalize on these opportunities (Keppel 1989).

II. Mass Murder

Mass murder consists of the slaughter of four or more victims by one or a few assailants within a single event, lasting but a few minutes or as long as several hours. While the most publicized type of mass murder involves the indiscriminate shooting of strangers in a public place by a lone gunman, other kinds of mass killing are actually more common. Included within this definition are, for example, a disgruntled employee who kills his boss and coworkers after being fired, an es-

tranged husband or father who massacres his entire family and then kills himself, a band of armed robbers who slaughter a roomful of witnesses to their crime, and a racist hatemonger who sprays a schoolyard of immigrant children with gunfire. Thus, the motivations for mass murder can range from revenge to hatred, from loyalty to greed; and the victims can be selected individually, as members of a particular category or group, or on a random basis.

In striking contrast to the expanding scholarly interest in serial homicide, mass killings—the slaughter of victims during a single act or a short-lived crime spree—have received relatively little consideration (for exceptions, see Levin and Fox 1985; Dietz 1986; Leyton 1986; Fox and Levin 1994a; Holmes and Holmes 1994). A number of factors seem to be responsible for this uneven attention to one form of multiple murder compared with another.

First, unlike serial killings, massacres do not pose much of a challenge to law enforcement authorities. Whereas serial killers are often difficult to identify and apprehend (see Egger 1984), a person who massacres is typically found at the crime scene—slain by his own hand, shot by police, or alive and ready to surrender. Frequently, the perpetrator welcomes his arrest or suicide, having achieved his mission through murder. In some exceptional cases, however, an execution-style mass killing is designed to cover up some other criminal activity. For example, seven people were murdered in a suburban Chicago restaurant in 1993. Although the case remains unsolved, robbery is strongly believed to be the motive (Fox and Levin 1994a).

Second, in contrast to serial murders, massacres do not tend to generate the same level of public fear and anxiety. Until a serial killer is caught, he may be on the loose for weeks, months, or years. Citizens are terrified; they want to protect themselves from becoming the next victim. Each newly discovered murder reenergizes the community's state of alarm. However, a massacre, though catastrophic, is a single event. By the time the public is informed, the episode is over. There may be widespread horror, but little anxiety.

A third factor responsible for the relative lack of attention to massacres involves the limited availability of primary data. Many mass killers do not survive their crimes. Although they may leave diaries or notes to help us understand their motivation, questions concerning motive and state of mind often remain in doubt. While the typical serial killer may twist the truth when and if interviewed, he nevertheless yields significantly more information than we have on those who massacre.

Finally, perhaps the most prominent reason for the relative neglect of mass murder as a form of multiple homicide is that it cannot compete with the sensational character of serial murder. The public, the press, and researchers alike appear to be drawn to the sexual and sadistic proclivities of such predators as Theodore Bundy and Jeffrey Dahmer (see Dietz 1996). As further evidence that sensationalism plays a critical role in the level of interest, serial murders that do not contain sex and sadism (e.g., slayings in hospitals and nursing homes, or serial killing for profit) are all but ignored by some researchers (see, e.g., Holmes and DeBurger 1988).

A. Patterns of Mass Murder

Psychiatric research (see Westermeyer 1982) has generally advanced the following hypotheses concerning mass murder: that victims of mass slayings are usually strangers to their killer who selects them at random because they happen to be "in the wrong place at the wrong time," that mass murderers "go berserk" or "run amok"—they are totally out of touch with reality, that is, psychotic—and that organic factors (e.g., medications like Prozac and Ritalin, alcohol, psychotropic drugs, brain tumors, blows to the head, etc.) often produce indiscriminate outbursts of violence. This research, by focusing heavily on atypical cases of episodic violence in which bizarre and irrational behavior is profoundly implicated, provides at best a partial understanding of the etiology and character of mass homicide.

Although these data are hardly flawless, the FBI's Supplementary Homicide Reports provide some ability to examine the characteristics and circumstances of massacres and to compare massacres with their single-victim and double/triple-victim counterparts. Compiled in incident-based form, these data offer detailed information on location, victim and offender age, race and sex, victim/offender relationship, weapon use, and circumstance for virtually all homicides known to police for the years 1976–95 (Fox 1997). Using these data, we can assess the widely held view that victims of massacres are usually strangers to their killer who selects them on a random basis after he "goes berserk." At the same time, it is possible to determine whether massacres differ enough from single-victim homicide that they ought to be regarded as a distinct and separate phenomenon deserving of their own theoretical framework.

For this analysis, manslaughters by negligence and justifiable homicides were expunged from the data set. Homicides involving arson, an

event in which the intent of the perpetrator may be to destroy property rather than lives, were also removed from the data analysis. Even after removing incidents classified as arson, there remained a modest number of multiple-victim homicides in which the weapon was fire. In order to avoid distortion by including incidents for which the circumstance of arson may have been missed, all homicides involving fire were also eliminated. This exclusion may produce a slight bias in the patterns and prevalence of mass murder (as there are a few mass killers who specifically select fire), but the potential for large distortion by inclusion of cases in which the murder may not have been planned is avoided. Finally, the 1995 bombing of an Oklahoma City federal building was eliminated from the data because its enormity and special character would grossly distort the statistical results.

For this analysis, mass murder is defined operationally as a criminal homicide claiming four or more victims (not including the perpetrator in the event of a mass murder/suicide). These homicides are then compared with single-victim, double, and triple homicides. In order to avoid distortion by multiple counting, incident-, offender-, and victim-based files are alternately used to examine characteristics along these dimensions (see Fox [1996] for a discussion of data structure).

As shown in table 1, the data set contained 483 massacres involving nearly 700 offenders and over 2,300 victims for the period 1976–95. Although there is considerable fluctuation over this time span, on average, two incidents of mass murder occurred every month in the United States, claiming more than 100 victims annually. Most incidents, of course, are not as widely publicized as the horrific slaughters of fourteen postal workers in an Oklahoma post office in 1986 or of twenty-three customers in a Texas restaurant in 1991. Still, the phenomenon of the massacre, although hardly of epidemic proportions, is not the rare occurrence that it is sometimes assumed to be. Compared to serial killing, mass murder claims about twice as many victims per year, using Hickey's (1997) 1975–95 estimate as a basis, although the "dark figure" (unidentified cases) for serial murder is far more substantial than for mass murder.

Tables 2–5 display situational, incident, offender, and victim characteristics by type of homicide. Note that, because the data represent the universe of cases (or close to it) rather than a random sample, significance tests are not executed for any of the comparisons.

As shown by the situational data in table 2, the differences in season are quite modest, with mass murders slightly more prevalent than

TABLE 1
Mass Murder Incidents, Offenders and
Victims, 1976-95

Year	Incidents	Offenders	Victims
1976	24	31	119
1977	32	38	141
1978	19	26	88
1979	36	45	162
1980	29	47	131
1981	18	30	92
1982	30	39	154
1983	20	24	94
1984	21	25	123
1985	14	16	64
1986	19	27	97
1987	19	23	117
1988	22	30	110
1989	24	39	117
1990	22	38	103
1991	30	42	156
1992	28	44	127
1993	32	52	155
1994	17	31	74
1995	27	50	129
Total	483	697	2,353

SOURCE.—Fox (1997).

other forms of murder in the summertime (28.8 percent). Although not shown in the table, these crimes tend to peak in the month of August, over 12 percent occurring during this particularly warm summer month. More noteworthy is the fact that mass murders do not tend to cluster in large cities (only 34.0 percent), as single-victim crimes do (39.0 percent); instead, massacres are most likely to occur in small town or rural settings (43.3 percent compared to 34.1 percent). The most striking differences are associated with region. While the South (and the deep South in particular) is known for its high rates of murder (42.1 percent for single-victim incidents), this does not hold for mass murder (31.3 percent). In comparison to single-victim murder which is highly concentrated in urban areas populated by poor blacks and in the deep South where arguments are more often settled through gunfire (see, e.g., Doerner 1975), mass murder more or less reflects population distribution.

TABLE 2
Situational Characteristics by Homicide Type, 1976–95 (in Percent)

	Single Murder (N = 361,219)	Double Murder (N = 10,204)	Triple Murder (N = 1,285)	Mass Murder (N = 483)
Season:				
Winter	24.3	25.9	26.3	24.6
Spring	24.3	24.2	25.6	22.8
Summer	26.5	25.8	24.2	28.8
Fall	24.9	24.0	23.9	23.8
Urbanness:				
Large city	39.0	33.0	28.7	34.0
Medium city	27.0	25.2	27.9	22.8
Small town/rural	34.1	41.8	43.3	43.3
Region:				
East	17.4	15.4	16.1	23.2
Midwest	18.7	19.5	22.3	23.4
South	42.1	38.0	34.0	31.3
West	21.8	27.1	27.5	22.2

SOURCE.—Fox (1997).

NOTE.—Percentages for each group sum to 100 percent.

Table 3 displays incident characteristics—weapon use, victim-offender relationship, and circumstance—by type of homicide. Although these figures are slightly elevated by the exclusion of arson and other fire-related incidents, not surprisingly, the firearm is the weapon of choice in mass murder incidents (77.6 percent), even more than in single victim crimes (65.7 percent). Clearly, a handgun or rifle is the most effective means of mass destruction. By contrast, it is difficult to kill large numbers of people simultaneously with physical force or even a knife or blunt object. Furthermore, although an explosive device can potentially cause the death of large numbers of people (as in the 1995 bombing of the Oklahoma City federal building), its unpredictability would be unacceptable for most mass killers who target their victims selectively. In addition, far fewer Americans are proficient in the use of explosives compared with guns.

The findings regarding victim-offender relationship are perhaps as counterintuitive as the weapon-use results were obvious. Contrary to popular belief, mass murderers infrequently attack strangers who just happen to be in the wrong place at the wrong time. In fact, almost 40 percent of these crimes are committed against family members, and

TABLE 3
Incident Characteristics by Homicide Type, 1976–95 (in Percent)

	Single Murder (N = 361,219)	Double Murder (N = 10,204)	Triple Murder (N = 1,285)	Mass Murder (N = 483)
Weapon:				
Firearm	65.7	79.3	77.3	77.6
Knife	19.4	12.4	12.2	11.5
Blunt object	5.5	3.5	4.0	3.4
Other	9.4	4.8	6.5	7.5
Victim/offender relationship:				
Family	22.1	27.7	42.1	39.4
Other known	56.9	52.1	42.6	38.2
Stranger	21.0	20.1	15.3	21.4
Circumstances:				
Felony	26.2	35.6	33.7	37.5
Argument	53.2	37.9	31.3	23.1
Other	20.7	26.5	35.0	39.4

SOURCE.—Fox (1997).

NOTE.—Percentages for each group sum to 100 percent.

almost as many involve other victims acquainted with the perpetrator (e.g., coworkers). It is well known that murder often involves family members, but this is especially pronounced among massacres.

The differences in circumstance underlying these crimes are quite dramatic. While more than half of all single-victim homicides occur during an argument between the victim and offender (53.2 percent), it is relatively rare for a heated dispute to escalate into mass murder (23.1 percent). As suggested by the results, massacres of strangers are often committed to cover up other felonies, for example, armed robberies. The largest category of mass murder circumstance is unspecified in this table (39.4 percent other circumstances) primarily because of limitations in the Supplementary Homicide Report data. These crimes involve a wide array of motivations, including revenge and hate, as is discussed later.

Some of the most notable differences between homicide types emerge in the offender data shown in table 4. Compared to those offenders who kill one person, mass murderers are especially likely to be male (94.4 percent), are far more likely to be white (62.9 percent), and are somewhat older. Typically, the single-victim offender is a young

TABLE 4
Offender Characteristics by Homicide Type, 1976–95 (in Percent)

	Single Murder (N = 449,380)	Double Murder (N = 14,155)	Triple Murder (N = 1,737)	Mass Murder (N = 697)
Offender age:				
Under 20	20.6	19.2	17.1	15.9
20–29	40.5	41.6	38.4	43.3
30–49	30.8	32.5	38.9	36.3
50+	8.1	6.7	5.6	4.6
Offender sex:				
Male	87.3	94.3	93.2	94.4
Female	12.7	5.7	6.8	5.6
Offender race:				
White	46.4	59.4	59.1	62.9
Black	51.8	37.4	35.0	33.5
Other	1.9	3.3	5.9	3.6

SOURCE.—Fox (1997).

NOTE.—Percentages for each group sum to 100 percent.

male, slightly more often black than white, whereas the mass murderer is typically a middle-aged white male (this profile comes into sharpest focus for those mass killers who are motivated by something other than robbery).

The victim characteristics contained in table 5 are, of course, largely a function of the offender characteristics discussed above, indicating that mass killers generally do not select their victims on a random basis. That is, for example, the victims of mass murder are usually white (71.6 percent) simply because the perpetrators to whom they are related or with whom they associate are white. Similarly, the youthfulness (33.9 percent under twenty) and greater representation of females (42.7 percent) among the victims of mass murder, as compared to single-victim homicide, stem from the fact that a typical mass killing involves the breadwinner of the household who annihilates the entire family—his wife and his children.

Based on these results, the argument that mass murder is not especially distinct from murder generally (Dietz 1996) seems questionable. Instead, differences emerge in most comparisons, with single-victim homicide and mass killing positioned at the extremes. In many of these contrasts, however, the sharpest differences appear between single-victim homicide and multiple-victim killings (i.e., double, triple,

TABLE 5
Victim Characteristics by Homicide Type, 1976–95 (in Percent)

	Single Murder (N = 392,296)	Double Murder (N = 22,134)	Triple Murder (N = 4,179)	Mass Murder (N = 2,353)
Victim age:				
Under 20	14.5	19.0	32.5	33.9
20–29	34.3	32.1	26.3	24.1
30–49	36.2	30.7	27.1	28.8
50+	15.1	18.2	14.2	13.2
Victim sex:				
Male	77.6	64.3	57.8	57.3
Female	22.4	35.7	42.2	42.7
Victim race:				
White	50.3	65.4	66.5	71.6
Black	47.7	31.6	28.5	24.5
Other	2.0	3.1	4.9	3.9

SOURCE.—Fox (1997).

NOTE.—Percentages for each group sum to 100 percent.

and mass murder); these distinctions are then magnified in the case of massacres.

B. Factors Contributing to Mass Murder

Many people, when asked to imagine a mass murderer, think of killers who suddenly “go berserk” or “run amok.” They may recall George Hennard, Jr., who, in 1991, opened fire in a crowded Killeen, Texas, restaurant, killing twenty-three victims at random. Those old enough to remember may think of Charles Whitman, the ex-marine who, in 1966, killed fourteen and wounded thirty others while perched atop a tower at the University of Texas.

Indiscriminate or random massacres tend to resemble the acute outbursts of unrestrained violence, first recognized centuries ago in Malaysia as a syndrome known as “running amok” (Westermeyer 1982; Gaw and Bernstein 1992). Penamoks (those who run amok) are profiled as young, ambitious, but poorly educated men whose self-esteem had recently been threatened. Often described as quiet and withdrawn, penamoks have typically been diagnosed as schizophrenic.

These sudden, seemingly episodic and random incidents of violence are as unusual as they are extreme. As we discuss below, a majority of mass killers have clear-cut motives—especially revenge—and their vic-

tims are chosen because of what they have done or what they represent. The indiscriminate slaughter of strangers by a "crazed" killer is the exception to the rule (Levin and Fox 1985; Dietz 1986; Fox and Levin 1994a).

Finally, the more specific and focused the element of revenge, the more likely that the outburst is planned and methodical rather than spontaneous and random (see Kinney and Johnson [1993] and Fox and Levin [1994b] for a discussion of workplace avengers). Also, the more specific the targets of revenge, the less likely it is that the killer's rage stems from extreme mental illness.

If most massacres are not madmen, why then do they kill? Why would a thirty-one-year-old former postal worker, Thomas McIlvane, go on a rampage in Royal Oak, Michigan, killing four fellow postal workers before shooting himself in the head? And what would cause a twenty-eight-year-old graduate student, Gang Lu, to execute five people at the University of Iowa before taking his own life? Finally, why would a fifty-five-year-old Missourian, Neil Schatz, fatally shoot his wife, two children, and two grandchildren before committing suicide?

An analysis of numerous case studies (see Levin and Fox 1985; Fox and Levin 1994a) suggests a range of factors that contribute to mass murder. These factors cluster into three types: *predisposers*, long-term and stable preconditions that become incorporated into the personality of the killer; *precipitants*, short-term and acute triggers, that is, catalysts; and *facilitators*, conditions, usually situational, that increase the likelihood of a violent outburst but are not necessary to produce that response.

1. *Predisposers*. The first class of contributors predisposes the mass killer to act in a violent manner. Included here are *frustration* and *externalization of blame*.

In his early book, *The Psychology of Murder*, Stuart Palmer (1960) studied fifty-one convicted killers, most of whom had experienced severely frustrating childhood illnesses, accidents, child abuse, physical defects, isolation, and poverty. The mass murderer similarly suffers from a long history of frustration and failure, concomitant with a diminishing ability to cope, which begins early in life but continues well into adulthood. As a result, he may also develop a condition of profound and unrelenting depression, although not necessarily at the level of psychosis. This explains why so many mass killers are middle-aged; it takes years to accumulate the kinds of childhood and adulthood disappointments that culminate in this kind of deep sense of frustration.

For example, forty-one-year-old James Ruppert, who slaughtered eleven relatives in Hamilton, Ohio, in 1975, had been extremely incompetent in school, friendships, and sports throughout his youth, lost his father at an early age, suffered from debilitating asthma and spinal meningitis, was so uncomfortable around women that he never experienced a sexual relationship, and was unable to hold a steady job as an adult (Levin and Fox 1985). By focusing on frustration, we do not rule out the possibility in a few cases that the depression may have a biological or organic foundation. For example, Joseph Wesbecker, who murdered eight coworkers in a Louisville, Kentucky, printing plant, was being treated for depression, which itself could have been linked to his own history of failure.

Many people who suffer from frustration and depression over an extended period of time may commit suicide without physically harming anyone else. Part of the problem is that they perceive themselves as worthless and as responsible for their failures in life. Their aggression is intropunitive, that is, turned inward (Dollard et al. 1939; Henry and Short 1954).

Thus, a critical condition for frustration to result in extrapunitive aggression, that is, turned outward, is that the individual perceives that others are to blame for his personal problems (Henry and Short 1954). As a response-style acquired through learning, the mass killer comes to see himself *never* as the culprit but always as the victim behind his disappointments. More specifically, the mass murderer externalizes blame; it is invariably someone else's fault.

2. *Precipitants.* Given both long-term frustration and an angry, blameful mind-set, certain situations or events can—as a second class of contributors—precipitate or trigger violent rage. In most instances, the killer experiences a *sudden loss* or the threat of a loss, which from his point of view is catastrophic. The loss typically involves an unwanted separation from loved ones or termination from employment.

In 1991, for example, thirty-nine-year-old James Colbert of Concord, New Hampshire, killed his estranged wife and three daughters. Learning that his wife had started a new relationship, Colbert reasoned, "If I can't have her and the kids, then no one can." James Ruppert, by contrast, who killed eleven relatives on Easter Sunday 1975, was facing eviction by his mother from the only house in which he had ever lived. Either he stopped his drinking and paid his debts, or he would have to leave.

Employment problems are even more frequently found to precipi-

tate mass killing. In 1991, for example, postal worker Thomas McIlvane was fired from his job and lost his appeal for reinstatement just prior to his Royal Oak rampage, while Patrick Sherrill's supervisor threatened to fire him just two days before the 1986 Edmond, Oklahoma, Post Office massacre (Fox and Levin 1994b).

The overabundance of men among mass killers, even more than among murderers generally, may stem in part from the fact that men are more likely to suffer the kind of catastrophic losses associated with mass murder. Following a separation or divorce, it is generally the man who is ejected from the family home. Furthermore, despite advances in the status of women in America, males more than females continue to define themselves in terms of their occupational role ("what they do" defines "who they are") and therefore tend more to suffer psychologically from unemployment (Campbell 1991).

Although not as common as the loss of a relationship or employment, certain external cues or models have also served as catalysts for mass murder. According to Dietz (1986), a number of books, manuals, and magazines giving technical guidance in the use of product tampering and other poisoning methods are widely available to inspire and tutor those who seek revenge against individuals or corporations. While the so-called copycat phenomenon is difficult to document scientifically (however, see Phillips 1983), the anecdotal evidence is at least highly suggestive. For example, the rash of schoolyard slayings—beginning with Laurie Dann's May 1988 shooting at a Winnetka, Illinois, elementary school and ending with Patrick Purdy's January 1989 attack in Stockton, California—suggests the possibility of a "fad" element in which mass killers inspire one another. Most striking was the case of James Wilson of Greenwood, South Carolina, a "fan" of Laurie Dann. Much like his hero, Wilson, in September 1988, sprayed a local elementary school with gunfire, killing two children. When police searched Wilson's apartment, they found the *People Magazine* cover photo of Laurie Dann taped to his wall. They also learned in subsequent interviews with those who knew James Wilson that he talked about Dann incessantly (Fox and Levin 1994a).

The tendency for mass killing to be patterned after the actions of another is not limited to the mass media. In fact, any authority figure can potentially serve as a catalyst for extreme violence (Kelman and Hamilton 1989). For example, members of the Manson "family" and followers of Jim Jones were clearly inspired to kill by their charismatic leaders. These "father figures" provided their followers with an excuse

or justification for murder by making their "disciples" feel special and then convincing them that it was necessary to kill (Holmes and Holmes 1994).

3. *Facilitators.* The third and final class of contributory factors consists of facilitators, which increase both the likelihood and extent of violence. With respect to likelihood, mass killers are frequently isolated from sources of emotional support.

Mass murderers are often characterized in the popular press as "loners." It is indeed true that many of them are cut off from sources of comfort and guidance, from the very people who could have supported them when times got tough. Some live alone for extended periods of time. Other mass killers move great distances away from home, experiencing a sense of anomie or normlessness. They lose their sources of emotional support.

Most people who feel angry, hopeless, and isolated do not commit mass murder. In many cases, they simply do not have the means. It is almost impossible to commit a massacre with a knife or a hammer. Such weapons are potentially destructive, but are not *mass* destructive. Killers like James Ruppert and James Huberty were well trained in the use of firearms and owned quite a few of them. Ruppert often went target shooting on the banks of the Great Miami River; Huberty practiced at the firing range in his own basement. Moreover, both of them were armed with loaded firearms at the very time they felt angry enough to kill.

Finally, it is important to note a kind of explanation for episodic violence that does not translate to the model proposed here. In rare cases, biological factors may serve as precipitants, especially in instances where the usual predisposers and precipitants for mass murder are lacking (see Quinn, Holman, and Tobolowsky 1992). There are well-documented cases in which various forms of brain pathology—head traumas, epilepsy, and tumors—have apparently produced sudden and uncontrolled outbursts of violence, not consistent with the perpetrator's personality (see Valenstein 1976; Fishbein 1990). It remains to be seen, however, whether and to what limited extent biological catalysts are implicated in incidents of mass murder—a crime that tends to be methodical rather than episodic.

III. A Typology of Multiple Murder

A number of scholars have developed typologies for serial homicide. In an early attempt, for example, Holmes and DeBurger (1988) assem-

bled a motivational classification that distinguishes four broad categories of serial killers: visionary (e.g., voices from God), mission-oriented (e.g., ridding the world of evil), hedonistic (e.g., killing for pleasure), and power/control-oriented (e.g., killing for dominance). The hedonistic type is subdivided into three subtypes: lust, thrill, and comfort. While fewer researchers have considered mass murder types, Holmes and Holmes (1994), drawing heavily from an earlier effort by Dietz (1986), proposed a five-class categorization, including disciples (e.g., a youngster who follows the dictates of a charismatic leader), family annihilators (e.g., an estranged husband who slaughters his wife and children), "set and run" killers (e.g., a bomb setter), pseudocommandos (e.g., a person who stages military-style assaults in public places), and disgruntled employees (e.g., an ex-worker who executes his former co-workers).

These and other typologies of serial and mass murder often have a troubling, but unavoidable, degree of overlap among their categories (e.g., serial killers who at one level seek to exterminate marginal victims, yet also enjoy the thrill of conquest, or pseudocommandos who massacre their coworkers). The potential for dual motivation is particularly likely in multiple murders committed by a team or group of offenders. For example, in the "Sunset Strip" killing spree committed by Douglas Clark and Carol Bundy, he was a sexual sadist who killed for power and control, while she joined in the murders to remain loyal to her boyfriend and accomplice.

Even more problematic is the apparent extent of overlap between typologies of serial murder and mass killings. A number of serial murder cases better fit some mass killer type, and certain mass killers reflect motives common to serial offenders. For example, Richard Speck, who in 1966 raped and murdered eight Chicago nursing students in their dormitory, may have had robbery as a secondary motive, but his primary objective was, by his own admission, thrill-seeking or hell-raising. Likewise, the infamous Unabomber was technically a serial killer, yet he resembles the "set-and-run" mass killer type.

By focusing so much on timing (one victim at a time vs. several victims at once), criminologists may have artificially dichotomized cases of multiple murder and, therefore, have obscured important similarities between serial and mass killers in terms of their motivation. Partially as a result of this problem, researchers have employed a third form of multiple homicide—"spree killing"—to handle hybrid cases that cannot adequately be described as either a serial homicide or a

mass killing. As defined by Ressler, Burgess, and Douglas (1988), spree killers continue on a path of murder and mayhem without "cooling-off periods" between incidents. As a classic example, in 1958, Charles Starkweather embarked on an eight-day killing spree in which he and his girlfriend murdered ten victims, including her parents. Unfortunately, for most other cases, the issue of whether the killer or killers cooled off between incidents is seldom clear. For example, in 1990 Danny Rolling butchered five college students over a period of four days in three different locations; some authorities have labeled him a serial killer while others insist he was a spree killer. Similarly, it is debatable whether Ronald Gene Simmons was a spree killer or a mass murderer; at Christmastime 1987, he slaughtered his entire family of fourteen over a five-day period and then drove through town a day later killing a former boss and a young woman who had rejected him. Thus, adding a third category of multiple homicide does more to confuse than to clarify and places excessive emphasis on timing.

Incorporating many elements of earlier classification schemes, a unified typology of multiple murder can be constructed using five categories of motivation applicable to both serial and mass killing: power, revenge, loyalty, terror, and profit. The differences in motivations shown in table 6 seem to be far more important than the issue of timing.

A. Power

The overwhelming majority of serial killings and a substantial number of mass killings express a theme in which power and control are dominant. As indicated earlier, many serial murders can be classified as thrill killings. Although sexually motivated murder is the most common form, a growing number of homicides committed by hospital caretakers have been exposed in recent years. While not sexual in motivation, these acts of murder are nevertheless perpetrated for the sake of power and control. For example, Donald Harvey, who worked as an orderly in Cincinnati-area hospitals, confessed to killing over eighty patients over a period of years. Although he was termed a mercy killer, Harvey actually enjoyed the dominance he achieved by "playing God" with the lives of other people.

The thirst for power and control also inspired many mass murderers—particularly the so-called pseudocommando killers—who often dress in battle fatigues and have a passion for symbols of power, including assault weapons. In 1987, for example, nineteen-year-old Julian Knight, who was obsessed with military might and fashioned

TABLE 6
Generic Examples of Motivations for Multiple Murder

Motivations for Multiple Murder	Type of Multiple Murder	
	Serial Murder	Mass Murder
Power	Inspired by sadistic fantasies, a man tortures and kills a series of strangers to satisfy his need for control and dominance.	A pseudo-commando, dressed in battle fatigues and armed with a semiautomatic, turns a shopping mall into a "war zone."
Revenge	Grossly mistreated as a child, a man avenges his past by slaying women who remind him of his mother.	After being fired from his job, a gunman returns to the worksite and opens fire on his former boss and coworkers.
Loyalty	A team of killers turn murder into a ritual for proving their dedication and commitment to one another.	A depressed husband/father kills his entire family and himself to remove them from their miserable existence to a better life in the hereafter.
Profit	A woman poisons to death a series of husbands in order to collect on their life insurance.	A band of armed robbers executes the employees of a store to eliminate all witnesses to their crime.
Terror	A profoundly paranoid man commits a series of bombings to warn the world of impending doom.	A group of antigovernment extremists blows up a train to send a political message.

himself as a war hero, launched an armed assault on pedestrians in Melbourne, Australia, killing seven and wounding eighteen.

The motive of power and control encompasses what some earlier typologies have termed the "mission-oriented killer" (Holmes and De-Burger 1988), whose crimes are designed in order to further a cause. Through killing, he claims an attempt to rid the world of filth and evil, such as by killing prostitutes or the homeless. However, most self-proclaimed "reformists" are also motivated—perhaps more so—by thrill-seeking and power but try to rationalize their murderous behavior. The Unabomber alleged in his lengthy manifesto that his objective in killing was to save humanity from enslavement by technology. However, his attention-grabbing efforts to publish in the nation's most prominent newspapers, his threatening hoax at the Los Angeles air-

port, and his obsessive library visits to read about himself in the news suggest a more controlling purpose.

The true visionary killer, as rare as this may be, genuinely believes in his mission. He hears the voice of the devil or God instructing him to kill. Driven by these delusions, the visionary killer tends to be psychotic, confused, and disorganized. Because his killings are impulsive and even frenzied, the visionary is generally incapable of amassing a large victim count. Clearly, the Unabomber does not appear to meet the criteria for this category of multiple murder.

B. Revenge

Many multiple murders, especially mass killings, are motivated by revenge, either against specific individuals, particular categories or groups of individuals, or society at large. Most commonly, the murderer seeks to get even with people he knows—with his estranged wife and all her children or the boss and all *his* employees.

In discussing family homicide, psychiatrist Shervert Frazier (1975) has identified the concept of “murder by proxy” in which victims are chosen because they are identified with a primary target against whom revenge is sought. Thus, a man might slaughter all of his children because, seeing them as an extension of his wife, he seeks to get even with her. In 1987, for example, R. Gene Simmons massacred his entire family, including his grandchildren, in order to avenge rejection by his wife and an older daughter with whom he had had an incestuous relationship.

Frazier’s concept of “murder by proxy” can be generalized to crimes outside the family setting, particularly in the workplace. In 1986, for example, Patrick Sherrill murdered fourteen fellow postal workers in Edmond, Oklahoma, after being reprimanded and threatened with dismissal by his supervisor. He apparently sought to eliminate everyone identified with the boss.

Both these crimes involve specific victims chosen for specific reasons. Some revenge multiple killings, however, are motivated by a grudge against an entire category of individuals, typically defined by race or gender, who are viewed as responsible for the killer’s difficulties in life (Levin and McDevitt 1993). In 1989, for example, a long-term grudge against feminists ignited Marc Lepine’s murderous rampage at the University of Montreal, which resulted in the violent deaths of fourteen female engineering students. The 1973–74 San Francisco “Zebra killings,” in which a group of black Muslims executed fourteen

white "blue-eyed devils," illustrates the serial version of the category-specific revenge motive.

A few revenge-motivated multiple murders stem from the killer's paranoid view of society at large. He imagines a wide-ranging conspiracy in which large numbers of people, friends and strangers alike, are out to do him harm. George Hennard, for example, suspected that nearly everyone was against him. Unlike Marc Lepine, whose disdain was focused on one group (albeit large), Hennard hated humanity—women, Latinos, homosexuals, indeed all of the residents of the county in which he lived. In 1991, Hennard rammed his pickup truck through the plate glass window of Luby's Cafeteria in Killeen, Texas, and then indiscriminately opened fire on customers as they ate their lunch, killing twenty-three.

C. Loyalty

Unlike multiple murder for power or revenge, the remaining forms are more instrumental than expressive. A few multiple murderers are inspired to kill by a warped sense of love and loyalty—a desire to save their loved ones from misery and hardship. Certain family massacres involve what Frazier (1975) describes as "suicide by proxy." Typically, a husband/father is despondent over the fate of the family unit and takes not only his own life but also those of his children and sometimes his wife, in order to protect them from the pain and suffering in their lives.

For example, in May 1990, Hermino Elizalde, described by friends as a devoted father, was concerned that his recent job loss would allow his estranged wife to get custody of their five children. Rather than risk losing his beloved children, he killed them in their sleep, and then took his own life. By killing them all, Elizalde may have reasoned they would be reunited spiritually in a better life after death.

Some cases of family mass murder appear to involve at least some degree of ambivalence between revenge and loyalty. Such mixed feelings can be seen in the 1991 case of a thirty-nine-year-old suicidal father, James Colbert of Concord, New Hampshire, who strangled his wife out of jealousy and then killed his three daughters to protect them from becoming orphans.

Multiple murders committed by cults reflect, at least in part, the desire of loyal disciples to be seen as obedient to their charismatic leader. In an extreme case, more than eighty Branch Davidians died in 1993 in a fiery conflagration at their Waco, Texas compound. As devoted

followers of David Koresh, they were willing to die for their radical religious cause and the beloved leader who had inspired them (Fox and Levin 1994a).

D. Profit

Some serial and mass murders are committed for profit. Specifically, they are designed to eliminate victims and witnesses to a crime, often a robbery. For example, in 1983, three men crashed the Wah Mee Club in Seattle's Chinatown, robbed each patron, and then methodically executed all thirteen victims by shooting them in the head. More unusual, over a three-year period in the late 1980s, a Sacramento landlady in her sixties murdered and buried nine elderly tenants in order to steal their social security checks.

The 1989 ritualist cult slayings of fifteen people in Matamoros, Mexico, were committed by a band of drug smugglers practicing Palo Mayombe, a form of black magic. Human and animal sacrifice was thought by the group to bring them immunity from bullets and criminal prosecution while they illegally transported 2,000 pounds of marijuana per week from Mexico into the United States.

E. Terror

Some multiple homicides are in fact terrorist acts in which the perpetrators hope to "send a message" through murder. In 1969, The "Manson family" literally left the message "Death to Pigs" in blood on the walls of the Sharon Tate mansion, hoping to precipitate a race war between blacks and whites. Also, in 1978, three brothers—Bruce, Norman, and David Johnston—protected their multimillion dollar crime ring by eliminating several gang members whom they suspected would testify against them to a federal grand jury in Philadelphia. In the process, they also sent a message to the many remaining gang members, "snitch and the same thing will happen to you." In the Johnston brothers case, there was, of course, an element of profit in their crime ring, but the main objective in the murders was to create terror, that is, to remind everyone—not just gang members—just how powerful the Johnston brothers were.

It is not always possible to identify unambiguously the motivation for a multiple murder, to determine with certainty whether it was inspired by profit, revenge, or some other objective. In 1982, for example, seven residents from the Chicago area were fatally poisoned when they unknowingly ingested cyanide-laced Tylenol capsules. The killer

responsible for placing the poisoned analgesics on the shelves of area drug stores and supermarkets was never apprehended. If the killer's motivation was to exact a measure of revenge against society at large, then the victim selection was, in all likelihood, entirely indiscriminate or random. If, however, the motivation involved collecting insurance money or an inheritance, the killer may have targeted a particular victim for death and then randomly planted other tainted Tylenol packages to conceal the true intention.

IV. Discussion and Conclusion

The limited but growing literature on the topic of multiple murder is fairly rich with a wide range of explanations for the development of the serial killer and mass murderer. Unfortunately, this feature of the multiple homicide literature is more speculative than definitive and is based primarily on anecdotal evidence rather than hard data. Even the most rigorous studies rely on small, and in some instances biased, samples.

The range of causal hypotheses includes both biological and environmental factors. For example, episodic violence such as mass murder has been explained by the presence of head trauma (see Lewis et al. 1986), biochemical imbalances in the brain (see Walsh 1985), and the presence of frontal lobe epilepsy (see Westermeyer 1982). Others have focused on a number of childhood characteristics to account for the behavior of serial predators—such factors as child abuse (Norris 1988), adoption (Kirschner and Nagel 1996), and humiliation (Hale 1994).

There is, of course, a long tradition of research on the biological and environmental causes of violence (see, e.g., Chaiken, Chaiken, and Rhodes 1994), and the many associated methodological and interpretative qualifications need not be repeated here. Interestingly, however, many of the problems encountered in studying violence are exaggerated in dealing with violence as extreme as mass and serial murder.

First, the lack of adequately controlled studies is especially acute in this research arena. Based on in-depth interviews with thirty-six incarcerated murderers (mostly serial killers), for example, Ressler, Burgess, and Douglas (1988) found evidence of psychological abuse (e.g., public humiliation) in twenty-three cases and physical trauma in thirteen cases. Hickey (1997) reported that among a group of sixty-two male serial killers, 48 percent had been rejected as children by a parent or some other important person in their lives. Although useful for characterizing the backgrounds of serial killers, the findings presented by

Ressler and his colleagues and by Hickey lack comparison groups drawn from nonoffending populations for which the same operational definitions of trauma have been applied. Therefore, it is impossible to conclude if and to what extent serial killers have suffered more as children than others do. Future research using adequate comparison groups taken from nonoffender populations is critical for advancing our knowledge of the etiology of multiple homicide.

The emphasis on child abuse as a "cause" of murderous rage has become the latest excuse by multiple killers who attempt to deflect blame for their actions. Unfortunately, murderers who might exploit the "child abuse syndrome" to their own advantage frequently receive a sympathetic ear. As a sociopath, the serial killer is a particularly convincing and accomplished liar. As a professional trained to be supportive and empathic, his psychiatrist may be easily conned. The case histories of such malingerers as the Hillside Strangler Kenneth Bianchi and the Rochester prostitute slayer Arthur Shawcross, both serial killers who fooled mental health professionals with fabricated tales of child abuse, remind us to be skeptical about the self-serving testimony of accused killers eager to escape legal responsibility for their crimes (Fox and Levin 1994a).

The second problem in explaining multiple murder concerns its especially advanced age of onset—usually in the late twenties or thirties. This is particularly troublesome for those researchers who focus on relatively unchangeable constitutional factors or early childhood development. Although systematic research on the criminal histories of multiple murderers is lacking, among a number of well-known, "boy-next-door" serial and mass murderers, the absence of any prior criminal involvement is conspicuous. This strongly suggests that in future research criminologists need to emphasize the adolescent and adult experiences of multiple murderers in order to identify possibly critical variables in their later development (e.g., job loss, divorce, social isolation, etc.).

The late onset of multiple murder is, in addition, partially responsible for the third problem area—the inability to predict (and selectively prevent) this behavior from an understanding of early childhood events. Even more important from the standpoint of predicting multiple homicide, its low base rate and consequent false positive dilemma are overwhelming. A large or substantial segment of the multiple killer population may indeed share some common trait, but few of those who have this trait would become multiple killers. Kirschner and Nagel

(1996), for example, highlight the connection between adoption and serial homicide. In an analysis of David Berkowitz, New York's Son of Sam killer, they noted that the 1976-77 shooting spree occurred in the same neighborhood as his failed reunion with his birth mother. They also emphasized that Berkowitz's preference for shooting young couples in parked cars directly reflects the fact that he had been conceived out-of-wedlock in the back seat of a car. Regardless of the strength and dynamics of such a causal relationship, there may be thousands of adoptees who fail to bond with their adoptive parents or who hold deep-seated resentments toward their biological parents, but few of them kill anyone.

Predicting dangerousness—particularly in an extreme form like multiple homicide—has been an elusive goal (see Leibman 1989). Lewis and her colleagues (1986) suggest, for example, that the interaction of neurological/psychiatric impairment and a history of abuse predicts acts of extreme violence such as serial murder better even than previous violence itself. Unfortunately, this conclusion was based on retrospective “postdiction” with a sample of serious offenders, rather than a prospective attempt to predict violence within a general cross-section.

Criminological research into the causes of multiple murder is truly in its infancy. Little more than a decade has passed since the first scholarly publications addressing this phenomenon appeared. Moreover, most of the literature is anecdotal and speculative.

Lack of time is not the only reason for the dearth of systematic research. There remains a strong undercurrent of skepticism among many criminologists that the study of multiple homicide is more popular culture than serious scholarship.

Notwithstanding the resistance to research in this area, the study of serial and mass murder can contribute to our understanding of criminal behavior. Although some critics may point to the relatively low rates of these offenses (especially in comparison to the crimes to which much research is devoted), much can potentially be learned by studying one of the most extreme forms.

Multiple homicide is indeed atypical; but, of course, so are acts of genocide, such as the Armenian massacre of 1915 and the Holocaust during the Second World War. Social scientists study these events, not just for their historical significance, but to learn about elements of hate crimes expressed in less hideous forms. In the same way, we can learn much about the dynamics of ruthless inhumanity by examining sadistic

serial killers; we can learn about vengeful violence by studying workplace mass killers.

Even without these theoretical extensions, however, the study of multiple homicide would still have value. The number of perpetrators may be relatively few, but the degree to which they wreak havoc on their victims and on anxious communities warrants the serious attention of students of crime.

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