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Psychiatric Observations and Interpretations of Bite Mark Evidence in Multiple Murders

There are many reports in the literature of the study of murder and murderers from multiple viewpoints [1-13]. Few of these reports have been based on extensive periods of evaluation. This current paper is a partial report of the study of a man who can be termed a nonspecific mass murderer. His case is one in a series of the study of male mass murderers currently undergoing extensive investigation from multiple viewpoints. All of these cases have in common several elements and they compose a very selective subpopulation of those who murder. All persons selected for study have committed a minimum of 10 and as many as 30 murders over a period of more than five years. Most of the victims were not well known to the murderer. The victims were most often females, ranging in age from ten weeks to approximately 35 years of age. The mode of murder was violent, sexual, and sadistic, often including multiple behaviors such as strangulation, stabbing, and mutilation as well as other destructive actions. The personalities of these men are the focus of study with a major focus on the psychiatric evaluation of developmental processes. The evaluations included psychologic, genetic, and physiologic measures as well as any other areas of exploration deemed to be necessary.

These studies attempted to find some pattern that would enable the formulation of further areas of exploration. It is hoped that such patterns may assist in the delineation of factors in development that may contribute to this behavior and its expression. Finally, it is hoped that these studies lead to planning for prevention and intervention. These are not studies of response to treatment.

As with other subjects, the person reported here signed releases that permitted the collection and dissemination of data. Initial contacts with subjects clearly define that these are research studies and that no information obtained is of a confidential nature. All interviews are taped and transcribed, and this information is given to the person being studied when the study is completed. The person reported here has received all transcripts.

Case History

Currently this man is 31 years of age. He is in a maximum security institution in Wisconsin. He grew up in a middle to upper-middle class suburban neighborhood near Chicago. He was the second son with one brother ten years older than he. The brother is reported to be functioning well in family, work, and social situations. There are no other siblings. Father has been described as a dependable man who worked for the same

Presented at the 30th Annual Meeting of the American Academy of Forensic Sciences, St. Louis, Mo., February 1978. Received for publication 13 March 1978; revised manuscript received 27 July 1978; accepted for publication 3 Aug. 1978.

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company for 27 years. He died suddently in 1966, reportedly of a myocardial infarction in a hospital where he was being treated for hypertension. This event is remembered in extensive detail by the man being studied. It is noted that the death of father preceded by eight days the first murder in which the subject is suspect. The subject perceives father as being very strict, not permitting either son to date and using extensive physical means of control and discipline with all family members. Mother is alive and is described by the subject and others as a woman who was frequently inconsistent in expression of feelings, such as love and hate, toward others. She was experienced by this man in an ambivalent manner and he also describes her in a somewhat "shadowy," less substantial manner. This man reportedly attended Catholic schools throughout grade eight but is reported to have left high school in the eleventh grade. School adjustment from all reports was marginal. He entered the military but was discharged on a "209" following an alleged larceny six months prior to the discharge. He states he was discharged because he refused to cooperate after the denial of his request to go to Viet Nam. His work record is less than complete but is characterized by relatively short-lived positions of unskilled work such as cook and truck driver.

In 1973 he met a married woman, the mother of two girls, and lived with her until their marriage in 1974. The marriage occurred eleven days after the death of her 36-year-old husband of a myocardial infarction. The death was unexpected. The marriage also followed the death of a female child (born 4 Nov. 1973) on 3 Feb. 1974. It is suspected that this was not his child. In August 1975 a son was born to the couple, three weeks after an attempted homicide. The subject was arrested for this but left for California with the family. He arrived in California on 15 Nov. 1975 and was arrested on 4 Dec. 1975. He subsequently confessed to another crime and has since confessed to several others. Most known crimes were committed in Illinois and Wisconsin. There are suspicions that he has committed crimes in other states.

With the extensive evaluations, no abnormalities were noted. Diagnostic categorization of his mental status shows no consistent pattern of psychosis and he has been adjudged competent.

Basic Concepts

The method of study is primarily that of psychoanalytic and psychodynamic investigation of disruptions in the process of development. In later papers, the theoretical bases that underlie these studies will be expanded. However, essential to an accurate and more complete understanding of the initial development of the personality of these persons is the psychoanalytically based and empathic observation of behavior, along with the study of its determinants.

When one attempts to answer the question "why," especially in regards to the developmental study of murderers, one is faced with the difficulty of illustrating connections. The first connection is to the murderer's experience in relation to the outside world and his reactions to these experiences. Another is the need to study his behavior in the light of his character development, or internal world, and, again, his reactions to these internal experiences. Although one can never totally answer the question "why," one can look at the issue of what things make it possible that this person could have committed the crime. In regards to this case, this paper focuses on several personality characteristics. Many of the types of conflicts and defense mechanisms seen in him can be found in most persons. What distinguishes the person capable of committing violent and sadistic crimes is the severity or degree of the conflict and the total personality, which is unable to modify these conflicts.

The following terms and their use in this paper are presented for clarification. Aggression is a violent and destructive action that comes from internal tendencies expressed in be-

haviors intended to harm, destroy, humiliate, or constrain. Conceptually, aggression is defined as behavior that assists in resolution of *tension*. This is accomplished by an action that eliminates either the source of tension or what comes to represent the tension.

Primal aggression, veering away from the source of tension, is objectless. This objectless aggression can be the basis of unprovoked attack [14].

Homicide, the taking of the life of another, is conceptualized here as resulting from intense, unrelenting conflict between the person's internal and external environments. It is also used to describe a device with which the murderer attempts to regulate or control a disintegration of the personality.

Sadism is a behavior leading to the attainment of pleasure or satisfaction based on the infliction of suffering on another person [15].

Sexual sadism is the achievement of sexual satisfaction based on the torture, or killing, of another person.

Ego, a term with multiple meanings, is used here in relation to some of its functions—skeletal muscle control, memory, thought, feelings, and perception.

Superego is also used here simply as a functional term—conscience, the formation of ideals [16].

Libidinal refers to periods of early development in the human where one body area is the focus of emotional energy. During a libidinal phase there is one major way of relating to the environment (for example, the oral phase, when the child relates to his environment primarily with his mouth).

Behavioral Profile

This section of the overview of the personality of this person focuses on one of the behaviors that accompanied his mode of murder, the biting of his victims. This case involved over 400 h of direct contact, in various prison settings, over a one-year period. Countless communications have been received from him. As was noted above, extensive genetic, medical, and neurological evaluations showed no organic impairment or abnormality [17]. Psychological testing, hypnosis, and dream analysis supplemented the psychiatric and behavioral observations.

In collecting the information for this case, and others, several questions were asked. What is the basic personality of this man? Where and how is his development different from that of other persons? What, if any, events precipitated the murders? Why were women and girls murdered exclusively? Why did this man ritualistically bite his victims? Was his inability to remember some of the details of his crimes a result of amnesia, a not wanting to remember, or of an ego-deficit, an inability to remember? Is he capable of murder, not only those for which he has been charged, but others in which he is suspect?

The first issues discussed were related to critical life events. These events are selective of those times that may have either precipitated or prevented (by imprisonment, for example) the violent crimes. He had been discharged from military service and had lost his father, both unexpected events, within three months, so these events are speculated to have been experienced by him as a loss of something important. It is postulated that both the military and his father may have been seen by him as caring for him. He once depended on these things. They were no longer available to him, either for support or for assistance in controlling his behavior (Fig. 1).

Information in regards to alleged nonviolent actions of record was the next area in the study. Neither the military court-martial and subsequent discharge nor any juvenile actions are included because of the lack of specific, recorded detail. However, reports from the person suggest behavior present from at least age nine of fetishism and transvestitism. The apparent lack of crimes between September 1968 and August 1971 as well as between October 1972 and February 1973 can be related to periods of imprisonment. The longitu-

DATE	CRITICAL EVENT
DECEMBER 26, 1965	MILITARY DISCHARGE '209'
FEBRUARY 3, 1966	DEATH OF FATHER
OCTOBER 4, 1968	IMPRISONED
SEPTEMBER 27, 1971	PAROLED
SEPTEMBER 26, 1972	IMPRISONED
FEBRUARY 27, 1973	PAROLED
NOVEMBER 4, 1973	BIRTH OF WIFE'S DAUGHTER
FEBRUARY 8, 1974	DEATH OF WIFE'S HUSBAND
FEBRUARY 19, 1974	MARRIED
AUGUST 16, 1975	BIRTH OF SON
NOVEMBER 15, 1975	ARRIVED IN CALIFORNIA
DECEMBER 4, 1975	ARRESTED IN CALIFORNIA

DATE

FIG. 1—Critical life events that may have precipitated or prohibited criminal acts.

dinal study of these acts show that they began with voyeurism, a passive watching behavior, and gradually progressed to more active behaviors of burglary and traffic violations (Fig. 2).

Alleged violent behaviors constituted part of the study (alleged in that if he has not been formally charged, there are curious and consistent similarities in the modes of death to consider him potentially responsible). Eight days after the death of his father, Victim A, a 13-year-old girl, was found murdered. In September 1972 another murder occurred,

EVENT

APRIL 2, 1967	DISORDERLY CONDUCT (PEEPING TOM)
JULY 19, 1967	DISORDERLY CONDUCT (PEEPING TOM)
SEPTEMBER 10, 1967	DISORDERLY CONDUCT (PEEPING TOM)
OCTOBER 30, 1967	DISORDERLY CONDUCT (PEEPING TOM)
MAY 21, 1968	TRAFFIC VIOLATION
JUNE 27, 1968	DISORDERLY CONDUCT (PEEPING TOM)
JULY 26, 1968	BURGLARY
SEPTEMBER 21, 1972	TRAFFIC VIOLATION
MARCH 11, 1973	TRAFFIC VIOLATION (SPEEDING)
MARCH 26, 1973	TRAFFIC VIOLATION (DRIVING WITHOUT A LICENSE)
DECEMBER 29, 1973	TRAFFIC VIOLATION (SKID AND ACCIDENT)

FIG. 2-Alleged criminal acts characterized by nonviolent behavior.

this time of a 14-year-old girl (Victim B). A hit-and-run accident, involving two girls (aged 13 and 14) occurred in August 1973. Both girls were injured, and he was questioned about this accident. In February 1974 the ten-week-old daughter of his future wife was found dead in her crib. Death was reported as sudden infant death and reports note that the child had been badly burned on a heating pad. The year 1974 shows three other attacks or homicides: Victim C, a 24-year-old woman, and Victims D and E, a 26-year-old woman and her 3-year-old daughter, all strangled. The child had also been placed facedown in the toilet and drowned. Victim F, aged 27, was forcibly raped and survived a homicide attempt. In 1975, Victim G, 18 years old, was found murdered. Victim H, age 21, was also attacked and severely injured; he was charged with this crime, fled to California, and finally was arrested (Fig. 3).

The mode of murder or attack in all of these cases was sadistic, sexual, and violent. The attacks included stabbing, drowning, strangulation, mutilation, biting, and necrophilia in multiple combinations.

Psychiatric Profile

The psychiatric profile was compiled to attempt to answer, in part, some of the questions posed earlier. This is a man who on the surface views himself as a benevolent, sacrificing man [18], who provides as a "good father" and "loves all creatures," a man who appears as cooperative, helpful, and easy-going. He is powerfully built, short and stocky, and strikes one as having strong arms and a massive torso, reflecting enormous strength. Paradoxically, he has what appears to be an odd assembly of male and female characteristics, including a roundish body and soft, almost delicate features.

His superficial charm and affability, both striking and captivating, disintegrate if he is challenged. This is most apparent when one discusses his controlling, manipulative behavior or his lying. Suddenly, he can become a belligerent, demanding, angry, and violent person. He professes to "love beautiful things in life," yet views people as inanimate:

DATE	EVENT
FEBRUARY 11, 1966	HOMICIDE - A
DECEMBER 20, 1967	AGGRAVATED BATTERY
AUGUST 26, 1968	AGGRAVATED BATTERY
MAY 2, 1972	UNLAWFUL USE OF WEAPON
SEPTEMBER 12, 1972	HOMICIDE -B
SEPTEMBER 26, 1972	UNLAWFUL USE OF WEAPON
AUGUST 22, 1973	HIT AND RUN
FEBRUARY 3, 1974	DEATH OF WIFE'S DAUGHTER
AUGUST 15, 1974	HOMICIDE - C
SEPTEMBER 9, 1974	HOMICIDES - D AND E
OCTOBER 14, 1974	ATTEMPTED HOMICIDE - F
JULY 3, 1975	HOMICIDE - G
JULY 26, 1975	ATTEMPTED HOMICIDE - H

FIG. 3—Alleged criminal acts characterized by violent behavior.

things to be used, discarded, and replaced. This behavior has been reported to have been seen in other murderers. This man reports that he cannot tell if people are alive or dead unless they stop fighting him.

Why does he murder? What is in his personality that permits him to release the rage so barely concealed within himself? As part of the psychological evaluation, Rorschach testing and other psychologic parameters were completed. The test results, to be discussed in greater detail in subsequent papers, illustrate what is considered part of the primary focus of his conflicts. In the Rorschach test he responds on an oral level. This is noted to involve major areas in the demand, oral-aggressive, devouring categories [19]. Teeth with jagged edges are said to convey resentful and aggressive attitudes, and this is postulated to be in response to dependency needs that are not fulfilled and to show resentment towards parents (perhaps over feeling unloved), towards children who seem to be getting what he feels he did not get, and perhaps towards a "well-behaved" and admired older brother.

He sees figures as depriving him or devouring him. His is a preoccupation with the earliest phases of life, with severe conflict in the oral phase, which occurs before 18 months of age. It is a time when the child has no physical power to use weapons, other than teeth, to be destructive [20]. It is also the age when a dependent relationship with mother heralds the development of relationships with others. If this primary relationship is positive, there is, among other developments, the formation of cohesive thought and of a sense of separateness from another person. A negative outcome in this period is postulated to lead to the development of unintelligible, irrational, and confused speech and language as well as an inability to clearly distinguish self from others [21-24]. This is the time of development when the world seems not to exist outside immediate sight. It is also a period marked by a sense of timelessness [25,26]. Being the "center of attention" was felt by this man to be nearly nonexistent. This appears to have played a leading role in the development of his feelings of inadequacy and inferiority. He defended against these feelings with the use of an expansive defense, part of which was expressed as the need to be "all seeing." He continually appears to be more than he is and calls attention to himself (Fig. 4).

The increased orality, his need to feel that he really was the center of attention, and his decreased tolerance for frustration could have played a major role in his voyeurism and

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SUPPLY - ORAL RECEPTIVE
     A. PASSIVE FOOD RECEIVER - CHICKEN WITH BEAK
                                                                            CARD III
DEMAND - DRAL AGGRESSIVE
     A. DEVOURERS -
      TEETH WITH SHARP, JAGGED EDGES
                                                                            CARD II
       JAGGED, SHARP TEETH
      LOBSTER AND CLAWS
      HOOKS OR BEAKS; MOUTH PARTS
                                                                            CARD I
      BAT WITH TENTACLES AND CLAWS ON END
                                                                            CARD V
      WINGS WITH CLAWS THAT DIPEN AND CLOSE
      CLAWS AND HOOKS
                                                                            CARD VI
      OPENINGS FOR MOUTH
                                                                            CARD VII
      SPIDERS
                                                                            CARD VIII
                                                                            CARD IX AND X
    B. ENGULFING FIGURES AND DBUECTS - SPIDERS
                                                                            CARD VIII
    C. DEPRIVING FIGURES AND OBJECTS - CORSETS
                                                                            CARD VIII
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FIG. 4—Rorschach test responses indicative of oral/dependent preoccupation and orientation.

the exhibitionism [27] and can be seen clearly in his extensive letter-writing, involving daily letters, some up to 20 pages in length, and occasionally three letters a day. Curious in these letters is the observation that he does not communicate in them. They appear merely as ways of talking without any meaning. His is an impulsive style with little consideration of alternative methods, for example of spelling. Speculation is that his misspellings originated in this same early phase of development and reflect craving to be in the limelight [28], without the use of controls for his impulsiveness. These deficits in language will also be discussed in future papers in the light of object relations theory. Some of his representative errors are shown in Fig. 5.

Another sub-phase in the oral period of development is that of the oral-sadistic category. Hostility, attack, and destruction, again with a primarily oral orientation, are seen in his responses that focus on teeth (Fig. 6).

Another focal area of preoccupation for this man is within the anal phase of development. In him this is characterized in the focus on assaults and explosions. This anal phase follows the oral one in development. If there are deficits in the earlier oral period, during which the child begins to learn some control over his impulses [29], there will be deficits in this subsequent stage of development. For this man this is speculated to mean a lack of control and a lack of fusion between sexual and aggressive impulses [30]. Therefore, these feelings are "free" for expression without controls. The expression of aggression in the anal period can be seen later in his clinging, possessive love. It can also be seen in later sadistic play [31] (Fig. 7).

There was a sexual identity diffusion superficially present in this man. His Rorschach test responses indicate rejection or fear of a masculine identity, the denial of dependency needs, and passive, submissive longings towards men. These impressions speak to his unclear sexual identity. This diffusion of sexual identity can be related to the negative attitudes he has towards a father whom he saw as punishing. It is also reflected in his unsuccessful attempts to identify in some way with the male [32]. However, the feelings of inadequacy present from early life led to a withdrawal from competing with the male. This, in turn, seemed to contribute to his subsequent feelings of sexual inadequacy. Identifying with the mother reinforced the feminine aspects of him. The murder of women and girls is based on his deep contempt of and resentment towards women, reflecting his

ERROR	CORRECT
CHOIRAL	CAROL
SUPOSE	SUPPOSED
SCREEMING	SCREAMING
DEFENANT	DEFINITE
Exsist	Exist
EXPERANIENCED	EXPERIENCED
COUNCELTATION	CONSULTATION
ASUMTIONS	Assumptions
PITTYFALL	PITIFUL
CRUPTED	CORRUPTED
SUFFERCATING	SUFFOCATING

FIG. 5—Randomly chosen representative errors in written language and spelling.

SADISM - EMPHASIZES HOSTILITY, ATTACK, DESTRUCTION, VIOLENCE

ORAL ATTACK -

TEETH WITH SHARP, JAGGED EDGES STINGING TAIL

FIG. 6—Rorschach test responses indicative of sadomasochistic orientation.

ASSAULT; EXPLOSION

FIRE; BURNING GASES FORCED OUT OF SHIP
ROCKET SHIP EXPLODING FROM BOTTOM
AT BOTTOM, BLASTING OFF ENGINES

FIG. 7—Rorschach test responses indicative of preoccupation with anality.

contempt against his own strongly feminine identification. Murder of these persons was not accidental. Although he may not have known his victims well, their selection was not random. He perceived his victims as having characteristics that seemed to torment him. Unable to achieve sexual satisfaction, he began looking for other means of obtaining satisfaction. Fetishism, voyeurism, burglaries, and, finally, torture and murder were needed by him to achieve some satisfaction (Fig. 8).

The necrophilia and amnesia can be briefly mentioned here. They are linked. In his amnesia, there was an experience of the world where no trauma exists [33]. There was a decreased capacity for active attention and an inability to identify the difference between self and non-self. There was no difference between inner and outer worlds [34]. Other behaviors that occurred were the suspension of his usual sense of identity, an inability to carry out a complex series of motor acts and flight. His amnesia and the massive psychophysiologic reactions of sweating, headache, loss or near-loss of sphincter control, and the feeling of cold are correlated with the lack of ego functioning. Severe anxiety accompanied by denial of events, often described by him as "I was not myself," completed the experiences.

The necrophilia also appears to be a denial. It appeared to be an effort to resolve the conflict over death. By his treating the body as if it were alive, he could try to "bring it back" by putting life into it [35].

The use of rituals, whether cutting symmetric lines on the victims, biting them, taking souvenirs of them, or placing knots precisely in the ligatures, was characteristic of him. For him, the ritual appeared to be an almost "magical insurance" against the further loss of control of his impulses (an insurance or control over objects such as ligatures opposed his lack of control over the impulse to murder).

Summary

The subject's rage at not having his dependency needs met, as a child or as an adult; his continual failures in his attempts to live up to his own grandiose expectations [36];

FEMININE EMPHASIS - CORSETS

CARD VIII

HOSTILE, FEARFUL CONCEPTION OF MASCULINE ROLE
RED PART OF BLOOD

CARD II

GENERAL INCREASE IN ORAL, ANAL, SEXUAL IMAGERY

PREOCCUPATION WITH VARIETIES OF SENSUAL EXPERIENCE
COMMONLY SEEN IN HOMOSEXUAL MEN; PARTLY A REFLECTION
OF SEXUAL ROLE DIFFUSION

VAGINA
PENIS
VAGINA, ANUS

CARD VII
VAGINA, ANUS

FIG. 8—Rorschach test responses indicative of rejection and fear of masculine identity. Also noted were many responses of feminine identification in men. Usually these responses imply passive, submissive longings towards these figures. These responses can also imply megalomanic denial of these longings.

LIPS, DARKENED LIPS

and his increasing feelings of inadequacy and insecurity appeared to have finally exploded in destructive, repetitive attempts to have these needs fulfilled. These attempts were unsuccessful. Perhaps his personality can be best illustrated in his own words:

It was death. Beating on somebody, smacked right in face. Person screamed, got hit, started to hit back. Got hit, got more infuriated. Picked up the person, slammed them into the wall, beating until death, lifeless or unconscious. Had no controllable power over me. Until seen no response, until weren't fighting back. Person seems to change all the time. Small person, large person, huge and bulky-type person. Heads all cut up from teeth or buckle hitting person.

In summary, this is an early distortion of character that resulted in the lack of formation of superego or conscience; in an inability to withstand frustrations; in an inability to control hostile, sadistic, murderous impulses; in the lack of stable identity of self from others; in displaced anger towards women and men; in the lack of male identification or clear sexual identity; and in the lack of stable ego. His self-concern, without regard for others, led to excessive feelings of revenge and contempt, interpreted by him as powerlessness and helplessness. Fantasies of grandiose accomplishments and an inability to control the rage led, almost inevitably, to murder and death.

Acknowledgments

The author would like to note that consultants included Brooks Brenneis, Ph.D. for psychological evaluations and Mark Lubinsky, M.S., M.D., for genetic evaluations. Because the author thought that hypnosis required administration and that the subject's murdering of women and poor impulse control contraindicated hypnosis being performed by the author, the hypnosis was done by Roger McKinley, Ph.D. The author appreciates the extensive discussions with William H. Reid, M.D., M.P.H.; Duane Devore, D.D.S., Ph.D.; Lowell Levine, D.D.S.; and Stanley Schwartz, D.M.D., in regards to sociopathic characters and forensic odontology.

References

- [1] Karpman, B., "A Psychoanalytic Study of a Case of Murder," *Psychoanalytic Review*, Vol. 38, 1951, pp. 139-157, 245-270.
- [2] Bromberg, W., "A Psychological Study of Murder," International Journal of Psychoanalysis, Vol. 32, 1951, pp. 117-127.

- [3] Lamberti, J., Blackman, N., and Weiss, J., "The Sudden Murderer: A Preliminary Report," Journal of Social Therapy, Vol. 4, 1958, pp. 2-14.
- [4] Galvin, J. and MacDonald, J., "A Psychiatric Study of a Mass Murderer," American Journal of Psychiatry, Vol. 115, 12 June 1959, pp. 1057-1061.
- [5] Sotten, J., Menninger, K., Rosen, L., and Mayman, M., "Murder Without Apparent Motive: A Study in Personality Disorganization," American Journal of Psychiatry, Vol. 117, July 1960, pp. 48-53.
- [6] Weiss, J., Lamberti, J., and Blackman, N., "The Sudden Murderer: A Comparative Analysis," Archives of General Psychiatry, Vol. 2, June 1960, pp. 669-678.
- [7] Palmer, S., A Study of Murder, Crowell Co., New York, 1960.
- [8] Guttmacher, M., The Mind of the Murderer, Farrar and Straus, New York, 1960.
- [9] Blackman, N., Weiss, J., and Lamberti, J., "The Sudden Murderer: Clues to Preventive Intervention," Archives of General Psychiatry, Vol. 8, 1963, pp. 289-294.
- [10] Abrahamsen, D., "A Study of Lee Harvey Oswald: Psychological Capability of Murder," Bulletin of the New York Academy of Medicine, Vol. 43, No. 10, Oct. 1967, pp. 861-888.
- [11] Lunde, D., Murder and Madness, San Francisco Book Co., San Francisco, 1976.
- [12] Tanay, E., The Murderers, Dobbs-Merrill, New York, 1976.
- [13] Yochelson, S. and Samenow, S., *The Criminal Personality*, Vol. 1, Jason Aronson, New York, 1976.
- [14] Smith, J., Pao, P. N., and Schweig, N., "On the Concept of Aggression," Psychoanalytic Study of the Child, Vol. 28, 1973, pp. 331-346.
- [15] Freud, S., The Economic Problem of Masochism, translated by J. Strachey, Hogarth Press, London, 1955, pp. 157-172.
- [16] Freud, S., The Ego and the Id, translated by J. Strachey, Hogarth Press, London, 1955, pp. 3-66.
- [17] Mednick, S. and Christensen, K., Eds., Biosocial Bases of Criminal Behavior, Gardner Press, New York, 1977.
- [18] Medical World News, Vol. 11, 1973, pp. 39-45.
- [19] Schaefer, R., Psychoanalytic Interpretation in Rorschach Testing, Grune and Stratton, New York, 1954.
- [20] Tanay, E., "Psychiatric Study of Homicide," American Journal of Psychiatry, Vol. 125, No. 9, March 1969, pp. 1252-1258.
- [21] Mahler, M., "On Human Symbiosis and the Vicissitudes of Individuation," Journal of the American Psychoanalytic Association, Vol. 15, No. 4, Oct. 1967, pp. 740-763.
- [22] Mahler, M., "A Study of the Separation-Individuation Process and Its Possible Application to Borderline Phenomena in the Psychoanalytic Situation," *Psychoanalytic Study of the Child*, Vol. 26, 1971, pp. 403-424.
- [23] Mahler, M., "On the First Three Subphases of the Separation-Individuation Process," *International Journal of Psychoanalysis*, Vol. 53, No. 3, 1972, pp. 333-338.
- [24] Mahler, M., Pine, F., and Bergman, A., The Psychological Birth of the Human Infant, Basic Books, New York, 1975.
- [25] Linn, L., "The Discriminating Function of the Ego," Psychoanalytic Quarterly, Vol. 23, 1954, pp. 38-47.
- [26] Beck, S., Rorschach's Test II: A Variety of Personality Pictures, Grune and Stratton, New York, 1949.
- [27] Reich, A., "Pathologic Forms of Self-Esteem Regulation," Psychoanalytic Study of the Child, Vol. 15, 1960, pp. 215-232.
- [28] Greenacre, P., "Certain Relationships Between Fetishism and Faulty Development of the Body Image," Psychoanalytic Study of the Child, Vol. 8, 1953, pp. 79-98.
- [29] Malmquist, C., "Conscience Development," Psychoanalytic Study of the Child, Vol. 23, 1968, pp. 301-331.
- [30] Freud, A., "Aggression: Normal and Pathological," Psychoanalytic Study of the Child, Vol. 3/4, 1949, pp. 37-42.
- [31] Beres, D., "Clinical Notes on Aggression in Children," Psychoanalytic Study of the Child, Vol. 7, 1952, pp. 241-263.
- [32] Duncan, G., Frazier, S., Litin, E., Johnson, A., and Barron, A., "Etiological Factors in First Degree Murder," *Journal of the American Medical Association*, Vol. 168, No. 13, 29 Nov. 1958, pp. 1755-1758.
- [33] Eissler, K., "An Unusual Function of an Amnesia," Psychoanalytic Study of the Child, Vol. 10, 1955, pp. 75-82.
- [34] Rubinfine, D., "Perception, Reality Testing and Symbolism," Psychoanalytic Study of the Child, Vol. 16, 1961, pp. 73-89.
- [35] Ehrenreich, G., "Headache, Necrophilia and Murder: A Brief Hypnotherapeutic Investigation of a Single Case," Bulletin of the Menninger Clinic, Vol. 24, No. 6, Nov. 1960, pp. 273-287.

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[36] Kohut, H., The Analysis of the Self. A Systematic Approach to the Psychoanalytic Treatment of Narcissistic Personality Disorders, International Universities Press, New York, 1971.

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