

**MEMORY [AMNESIA] ISSUES AND THE
FORENSIC PSYCHOLOGICAL EXAMINATION**

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INTRODUCTION

Unquestionably, one of the most daunting problems that can confront a defense attorney attempting to construct a defense strategy for his client is the client who claims amnesia for some or all of the behavior associated with the alleged crime. Frequently, the frustration that this situation engenders for the defense attorney leads to a referral to the forensic psychologist for assistance.

Today's presentation will focus on this particular type of forensic referral and explore how the forensic examiner, typically, evaluates these issues of claimed memory loss within the context of the court referral for Competency to Stand Trial [CTST] and Criminal Responsibility [CR].

We will begin with a review of the "Usual Suspects" that are mentally entertained by the forensic examiner confronted by the amnesic defendant and conclude with a discussion of how genuine claims of amnesia impact upon the referral issues of CTST and CR.

USUAL SUSPECTS

To begin with, it has been my experience that claims of Amnesia can be attributed, by-and-large, to one or more of the following four explanations. These "explanations" will be presented here in the order of their frequency of occurrence in the context of a psychological forensic examination.

1. Alcohol [and other drug] Intoxication resulting in "blackout."
2. Malingering Memory Loss/Mental Retardation and/or Mental Illness.
3. Memory loss resulting from neurological trauma and/or brain injury.

4. Dissociative Amnesic Psychological Disorders or “Thought Blocking,” sometimes present in Schizophrenia.

I. Alcohol Blackout

Claims of intoxication leading to amnesia [Blackout] are, actually, fairly common in the context of a forensic psychological examination.

What is an alcohol induced blackout and how does it impact upon memory?

Alcohol and memory: Blackouts represent episodes of amnesia during which the person is capable of participating, even in salient, emotionally charged events—as well as more mundane events—that they later cannot remember. Like milder alcohol-induced memory impairments, these periods of amnesia are anterograde, meaning that alcohol impairs the ability to form new memories while intoxicated, but does not erase memories that were formed prior to becoming intoxicated.

Formal research into the nature of alcohol-induced blackouts began in the 1940s with the work of E.M. Jellinek [1946]. Jellinek's initial characterization of blackouts was based on data collected from a survey of Alcoholics Anonymous members. Noting that recovering alcoholics frequently reported having experienced alcohol-induced amnesia while they were drinking, Jellinek concluded that the occurrence of blackouts is a powerful indicator of alcoholism.

In 1969, Goodwin and colleagues published their findings from studies based on interviews with 100 hospitalized alcoholics 64 of whom had a history of reporting blackouts. These authors suggested the existence of two qualitatively different types of blackouts:

People experiencing the first type, so-called en bloc blackouts are unable to recall any details whatsoever from events that occurred while they were intoxicated, despite all efforts by the drinkers or others to cue recall. En bloc memory impairments tend to have a distinct onset. It is usually less clear when these blackouts end because people typically fall asleep before they are over. Information pertaining to these events is simply not transferred into long-term memory storage.

The second type of blackouts, fragmentary blackouts, as the name suggests, involve partial blockage of memory formation for events that occurred while a person was intoxicated. Goodwin and colleagues [1969] reported that research subjects experiencing fragmentary blackouts often become aware that they are missing pieces of events only after being reminded that the events occurred. Research suggests that fragmentary blackouts are far more common than those of the en bloc variety.

Blacking out vs. passing out:

Blacking out is commonly confused with passing out. In point of fact, these two

conditions are mutually exclusive. That is, by definition, at any given time, you cannot have one if you have the other. A blackout is a period of amnesia during which the person is actively engaged in behaviors (e.g., walking, talking) but the brain is unable to form new memories for the events, leaving the person unable to recall the events once they are no longer intoxicated. Indeed, far from losing consciousness, the literature suggests that it is possible for individuals to experience blackouts while appearing only moderately intoxicated to the outside world.

Given that blackouts tend to occur at relatively high Blood Alcohol Levels [BAL], particularly after rapid consumption of alcohol, it is certainly possible that an individual could experience a blackout prior to passing out. However, the two states cannot occur simultaneously, as a person cannot be both conscious and unconscious at the same time.

Alcohol Blackouts and Confabulation of Memory: In psychology and psychiatry the term confabulation is defined as the replacement of a gap in a person's memory by a falsification that he or she believes to be true.

Confabulation is sometimes employed by a person who has experienced a psychosis or, more frequently, a person following a fragmentary type of alcohol induced blackout. Defendants who experience a blackout following intoxication will, quite naturally, ask others "What happened?" Subsequently, they may incorporate into their subsequent "recall" of the offense what others told them about what they observed them to do or, sometimes, even the mere speculations by other of what "might have" happened to the defendant during the blackout.

In my experience as a forensic examiner, this tendency to "adopt a memory" proffered by others or one that is, shall we say, more consistent with the defendant's self-image [That is, the defendant's "tendency to confabulation"] is quite strong. Police officers, in particular, are very likely to suggest to a defendant who they are interrogating following arrest what he or she "...may have done" in the course of their committing an alleged crime. Embarrassed and frustrated at not being able to remember, defendants in such circumstances will often adopt the interrogating police officer's "suggestions" and, consequently, this [confabulated] "memory" then becomes a part of the interrogation record. Of course, on paper, this appears to indicate that the defendant "confessed" this "memory" to the police. Therefore, when interviewing defendants reporting a blackout for the legally relevant time, it is very important to repeatedly caution the defendant to only report what he or she actually remembers and not what someone else has told him or suggested happened during the course of the alleged offense.

The "problem" with confabulations that follow an intoxication induced blackout associated with a crime is that if the confabulated recall doesn't fit with the factually based material evidence surrounding the alleged crime, than, most likely, this will be mistaken for attempts at dissimulation [i.e., **Dissimulation** is a form of not revealing the truth, **Simulation**, is when one exhibits false information] or it will be mistaken for outright deception by the defendant.

Legal Issues Surrounding Alcoholic Blackouts

Alcohol Induced Blackout and Competency To Stand Trial

Concerning the issue of competency to stand trial in Michigan, MCL 330.2020, Section 1020, states in part that,

A defendant to a criminal charge shall be presumed competent to stand trial. He shall be determined incompetent to stand trial only if he is incapable because of his mental condition of understanding the nature and object of the proceedings against him or of assisting in his defense in a rational manner. The court shall determine the **capacity of a defendant to assist in his defense by his ability to perform the tasks reasonably necessary for him to perform in the preparation of his defense and during his trial.** (Emphasis added)

The absence of memory for an alleged crime, in itself, **is not a bar** to a finding of competence to stand trial under Michigan law.

Criminal Responsibility/Legal Insanity: The laws in most jurisdictions in the United States specifically disallow voluntary intoxication as a defense in criminal court, but involuntary intoxication, as by a prescribed drug or poisoning by others, is a valid defense.

In Michigan the law reads as follows:

An individual who was under the influence of voluntarily consumed or injected alcohol or controlled substances at the time of his or her alleged offense is not considered to have been legally insane solely because of being under the influence of the alcohol or controlled substances.

Therefore, what is basically intended by this limitation of the legal insanity law is that the law will not excuse liability if the state of legal insanity is brought on by intoxicants voluntarily taken or where the intoxication is the only manifestation of the insanity. Thus, so long as such intoxication is considered by law to be voluntary, and in that voluntary intoxication cannot excuse liability for a crime; generally, there apparently is no sound reason for the same intoxication to excuse liability where it produces effects, which would otherwise constitute “legal insanity.”

The fundamental problem for the forensic examiner in evaluating a defendant who was in an alcohol induced blackout is the near impossible task of “reconstructing” the defendant’s mental state at the legally relevant time in the absence of the defendant’s ability to inform the examiner as to his thinking, emotions, or behavior.

II. Malingering Memory Loss

The term malingering is defined in the Diagnostic and Statistical Manual Of Mental Disorders, Fourth Edition, [DSM-IV] as follows:

The essential feature of Malingering is the intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external incentives such as avoiding military duty, avoiding work, obtaining financial compensation, evading criminal prosecution, or obtaining drugs.

Malingering should be strongly suspected if any combination of the following is noted:

1. Medicolegal context of presentation (e.g., the person is referred by an attorney to a clinician for examination)
2. Marked discrepancy between the person's claimed stress or disability and the objective finding
3. Lack of cooperation during the diagnostic evaluation and in complying with the prescribed treatment regimen
4. The presence of Antisocial Personality Disorder

In my experience, the issue of "possible Malingering" is an essential part of any forensic examination. No forensic examination is complete without examining the possibility of malingering and no opinion can be offered as to the genuineness of the clinical presentation by the examiner without also evaluating the reliability of the information gathered.

Levels of Malingering

Malingering is not an all-or-nothing phenomenon; it exists on several levels. The person who is exaggerating genuine symptoms in an attempt to create the appearance of a more severe form of psychopathology represents one level. Another level of malingering involves an examinee who uses deceit to extend legitimate symptoms back to the time of the criminal activity in order to reduce culpability. Lastly there are individuals who completely fabricate symptoms for the sole purpose of receiving an external incentive.

Malingering and Reliability

The difference between malingering and simple unreliable reporting is a matter of the

individual's intent. Malingering, by definition, is deliberate. Both degree of intentionality and distortion should be considered when labeling a potential malingerer. Where intentionality is in doubt, the examinee may be classified as unreliable. The information provided may be inaccurate and not present a valid portrait of the individual's condition, but that is not due to purposeful distortion. As the evidence for dishonest responding increases, so might the level of malingering from suspected to definite. This classification system provides clinicians with an opportunity to examine their degree of certainty.

Malingering and Mental Illness

Malingering and mental illness are not mutually exclusive phenomena. An individual might experience depressive symptoms, but feel pressure to exaggerate those symptoms in order to reduce criminal responsibility. Some of the more effective malingerers are those who have experienced or are experiencing actual symptoms. Clinicians should be willing to admit that malingering and mental disorders may co-exist and some malingerers are simply embellishing symptoms of genuine psychopathology (Rogers & Bender, 2003).

Prevalence of Malingering in Forensic Context

The prevalence of malingering is unknown and difficult to determine. In a sample of insanity defendants deemed sane, Rogers (1986) estimated that 4.5% were definite malingerers and approximately 20% were suspected of malingering. More recently, estimates of malingering in forensic populations reach 17% (Rogers, Sewell, Morey, & Ustad, 1996). The accuracy of such estimates is questionable because successful malingerers, by definition, are not detected and thus not included.

Minnesota Multiphasic Personality Inventory-2

The MMPI-2 (Butcher, Williams, Graham, Tellegen, & Kaemmer, 1989) is the most widely used and researched multi-scale measure of psychopathology. A thorough review of the MMPI-2 malingering literature is beyond the scope of this presentation (see Greene, 1997; Rogers & Bender, 2003; Rogers, Sewell, & Salekin, 1994). Professionals who are trained in MMPI-2 interpretation however can utilize the validity indicators, particularly the family of F scales (F, Fb, Fp), to generate hypotheses regarding the potential for dissimulation. Consistency scales (VRIN and TRIN) can be helpful in separating random responding and reading problems from other types of invalid profiles.

Malingering and Claims of Amnesia

Since it is really quite easy for the person to claim amnesia, malingering a memory loss is nearly always suspected when it is presented in the context of a forensic examination. Many examiners, almost out of hand, conclude that the defendant is malingering his or her claims of memory loss. Some, however, will take the time to do a more comprehensive "rule out" of malingering based on the acquisition of multiple sources of

collateral information to verify the veracity of claims of amnesia. In my opinion, the most comprehensive way to “rule out” malingering is to review all of the four “usual suspects” outlined in this presentation before giving an opinion.

In addition to reviewing the four areas outline here, some examiners will employ the Test of Malingered Memory (TOMM). As the title suggests, this test was specifically designed to detect feigned memory impairment. It is a 50-item recognition test for adults. It relies on the premise that malingerers will score less than expected, but not necessarily below chance. The test utilizes very simple problems that even persons with severe brain injury are able to answer correctly appreciably above chance [50/50].

[Reference: Tombaugh, T.M. (1997). The Test of Malingered Memory (TOMM): Normative data for cognitively intact and cognitively impaired individuals. *Psychological Assessment*, 9, 260-268.]

Review of the “Rule Out” Malingering Assessment

The assessment of malingering in a forensic context should be comprehensive and should never rely solely on a single measure due to the potential legal consequences associated with misclassification. In addition to the standard clinical interview, the acquisition of collateral information to verify the veracity of claims is essential.

If a psychometric instrument is used, it is vital that forensic evaluators be familiar with the validity and reliability of the feigning measures they utilize, and apply them only to the intended population. Although the research literature on malingering is ever expanding, psychological knowledge is still limited and conclusions should be drawn conservatively, remembering that evidence of exaggeration does not necessarily rule out a neurological or psychological condition. The intent of this chapter is only to provide a brief summary of evaluation techniques that are available. The following references will guide the interested practitioner to additional resources.

III. Brain Injury and Traumatic Amnesia

How can the brain be injured?

In the United States traumatic brain injury (TBI) is a leading cause of death for persons under age 45. TBI occurs every 15 seconds. Approximately 5 million Americans currently suffer some form of TBI disability. The leading causes of TBI are motor vehicle accidents, falls, and sports injuries. While the brain is by far the most complex object on earth, it is soft and vulnerable with a consistency of firm pudding.

A concussion is a sudden trauma-induced alteration of the alert state. The person may be unable to concentrate or be confused for a few seconds, or completely lose consciousness and fall down. The brain is capable of recovering from a concussion. However, many times some brain injury is permanent.

Traumatic Brian Injury

The brain is vulnerable to traumatic damage in two ways.

The cerebral cortex can become bruised - contused - when the head strikes a hard object (or a hard object strikes the head).

Or, the deep white matter can suffer diffuse axonal injury when the head is “whiplashed” without hitting a hard object (or being hit by one). In serious whiplash injuries, the axons are stretched so much that they are damaged.

Post Traumatic Amnesia [PTA]

Post Traumatic Amnesia (PTA) - loss of memory for events prior to the injury (retrograde amnesia) and events following the injury (anterograde amnesia) frequently occur after head injury. In general, a patient with longer periods of post-traumatic amnesia tends to have more of a severe injury in the long term. Studies have shown that individuals are not good at estimating their own length of amnesia.

Legal Issues Involving Brain Injury, Cognitive Deficits, and Post-Traumatic Amnesia

Assuming that there is documentation of the brain injury and how it originally occurred, and, furthermore, assuming that Malingering has been ruled out by the examiner, the relationship between the injury and the defendant’s “legal capacities” baring upon competency and criminal responsibility will need to be carefully explored by the forensic examiner.

Brain injuries of the variety relevant to forensic issues usually present with neuropsychological testing records, which certainly can be of valuable assistance to the examiner for identifying the range, degree of severity, and permanence of cognitive impairment. Absent pre-existing testing records, however, the examiner should make arrangements for the defendant to at least undergo a “neurological screening” for brain injury and if the screening process leads to “suspicion of brain injury,” then a full neuropsychological testing needs to be completed in order to address this clinical finding because cognitive impairments caused by brain damage almost always have significant consequences for learning and memory and for the person’s overall “cognitive capacities,” relative to the quality of the person’s capability for making reasoned judgments, accurate perceptions of reality, and problem solving in a variety of social situations.

Limitations of learning, memory, and the overall cognitive integrity of the person’s mental apparatus, of course, bare upon the legal concerns for the determination of competency to stand trial and criminal responsibility in very important ways.

Neurological Impairment and CTST

Traumatic Amnesia for a crime caused by a head injury or other neurological impairment,

acquired in the course of committing a crime or subsequent to its commission, tends to lead to the same kinds of problems already discussed when we reviewed the legal consequences of intoxication induced blackouts. And, once again, inability to remember a crime is not, in itself, a bar to a defendant being determined to be competent to stand trial.

However, in some cases of brain injury, not being able to remember the alleged criminal behavior or the circumstances surrounding same, is the least of the defendant's cognitive problems. More often than not, brain injury with the onset of traumatic amnesia will lead to significantly more pervasive cognitive deficits and, thus, ultimately render the person unable to perform a wide range of everyday functions that most of us enjoy. Such persons are likely to be identified as significantly disabled and to require guardianship due to their lack of capacity to make judgments about their medical needs, finances, and so forth.

In such instances, the person is incompetent to stand trial for, approximately, the same reasons why the probate court has seen fit to appoint them a guardian. That is, they do not have the capacity to assist in a criminal defense. These persons would be recommended to the court as "permanently incompetent to stand trial" due to the improbability of their ever attaining competency in the future.

Now, you would certainly think that a person who would qualify for a recommendation of incompetent to stand trial would be very obviously incompetent in his clinical presentation. However, I have had cases where it seemed obvious to the defense attorney and myself that the person lacked the capacity to participate in his defense and, nevertheless, he was recommended as CTST by the Forensic Center.

[Sight example of man who shot himself in the head after shooting his girlfriend and survived with severe TBI]

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In taking up the issue of Criminal Responsibility, in my experience, persons who are significantly brain injured do not tend to commit crimes, at least not with the mens rea that is required by law in order to be found guilty of a crime. Sometimes, a defendant with less severe brain injury will become involved in committing a crime and in those instances the problem of making a recommendation as to legal insanity can be quite challenging for the forensic examiner. Of course, this person would have first been determined to be competent to stand trial and, therefore, the person's cognitive functioning will likely have demonstrated a substantial recovery of capacity, post injury. Otherwise, persons who allegedly commit crimes and who are also significantly brain injured would probably fall into the "permanently incompetent" classification.

The Defense of Automatism

In some, very unusual circumstances, someone with brain injury, a brain tumor, or a seizure disorder will commit a crime in a mental state defined as “automatism.” Automatism is probably best defined as “the absence of mind.” That is, the mens rea is absent inasmuch as the criminal act took place when the person was on “auto-pilot.” In a few instances, defendants have been acquitted of offenses committed in a state of automatism for brain injury, including “alcoholic automatism.”

IV. Psychological Disorders Causing Amnesia:

Sometimes, thankfully, in rare instances, a reported “memory loss” [amnesia] has a primary psychological cause. In these instances, the amnesia is due to unconscious psychological mechanisms. In such cases, therefore, the reports of amnesia from the client are, actually, an indication of an underlying psychological disorder, such as a Schizophrenia with Thought Blocking or a Dissociative Disorder. That is, the amnesia is but a “symptom” of a diagnosable psychological disorder. Now and again, these disorders and the cognitive difficulties they manifest in terms of their symptoms presentation, clinically, can significantly impact upon the forensic issues of CTST and CR.

Schizophrenia With Thought Blocking

Major psychological disorders of thought process involves disturbances in cognitive focus, reasoning, and concept formation. Cognitive focus involves the normal ability to

1. Scan information selectively;
2. Attend to essential stimuli and ignoring irrelevant stimuli;

Someone with Schizophrenia will suffer from impaired cognitive focusing and they are, consequently, unable to effectively select relevant aspects of a stimulus field or adjust attention in response to changing situations.

One form of cognitive impairment in a person with Schizophrenia might be “**Thought Blocking**,” wherein the individual’s associative mental activity comes to a complete halt. Thought blocking is sometimes described as “thought deprivation,” and it differs from the common experience of losing one’s train of in that the ordinary thinker usually experiences the latter process as one of distraction in which he loses track of some other association or perception. In contrast, thought blocking, apparently involves a complete halt to the associative process resulting in an absence of thought content for a brief period of time.

At times, the presence of thought blocking can appear, clinically, to look quite like

amnesia inasmuch as the appearance of thought blocking tends to manifest whenever the subject approaches a discussion of the circumstances surrounding the alleged criminal behavior.

Treatment of the symptom of thought blocking is simply the same psychiatric treatments employed for Schizophrenia, generally. However, it still could be the case that a person's Schizophrenia would go into good remission but he or she still cannot recall events surrounding the legally relevant time frame.

Dissociative Psychological Disorders

In current psychiatric diagnostic terms, the category of Dissociative Disorders includes a wide variety of syndromes whose common core is an alteration in consciousness affecting memory and identity (DSM-IV). These diagnostic categories are as follows:

1. **Psychogenic amnesia**, the client suffers a loss of autobiographical memory for certain past experiences;
2. In **Dissociative Amnesia**, the amnesia is quite extensive, covering the whole of the individual's past life; and it is coupled with a loss of personal identity and, often, physical movement to another location wherein a different personality is assumed;
3. In **Dissociative Identity Disorder (DID)** [Formally known as Multiple Personality Disorder], a single individual appears to manifest two or more distinct identities, each personality alternating in control over conscious experience, thought, and action, and separated by some degree of amnesia from the other(s);
4. In **depersonalization disorder** the person believes that he or she has changed in some way, or is somehow unreal and is characterized by a persistent or recurrent feeling of being detached from one's mental processes or body that is accompanied by intact reality testing;
5. And, finally, the category covers a number of "miscellaneous disorders and syndromes," including **Dissociative Disorder Not Otherwise Specified** [DDNOS]; pathological **trance states**; and dissociative states occurring in association with brainwashing, thought reform, or cult indoctrination.

While impairments of memory and consciousness are often observed in the organic brain syndromes, the dissociative disorders are functional in nature: they are attributable to instigating events or processes that do not result in insult, injury, or disease to the brain, and produce more impairment than would normally occur in the absence of this instigating event or process. These disorders are thought to have their origin in a traumatic event or events the individual experienced prior to the appearance of the

disorder. In DID, the events leading to the development of the disorder are thought to be found in repeated and severe abuse experienced in early childhood. The Dissociative Disorders appear to be rather rare, but for more than 100 years these and related phenomena have been objects of fascination for clinicians and experimentalists alike.

The essential feature of the Dissociative Disorders **is a disruption in the usually integrated functions of consciousness, memory, identity, or perceptions of the environment.** The disturbance may be sudden or gradual, transient or chronic.

In dissociative disorders, the clinical appearance of amnesia characterized by an inability to recall important personal information, usually of a traumatic or stressful nature, **that is too extensive to be explained by ordinary forgetfulness.**

Forensic/Legal Aspects of Schizophrenic “Thought Blocking” and Dissociative Disorders

With respect to “Thought blocking” this can certainly present as a significant problem for the client’s capability for assisting his or her attorney in the development of a defense. Furthermore, inasmuch as thought blocking is but “one symptom” of Schizophrenia, and because Schizophrenia can, usually, be treated in a psychiatric setting with psychotropic medications and counseling, a referral for treatment to the Forensic Center for incompetence to stand trial [IST] is, likely, to be a prudent step for the examiner to take at the pre-trial stage.

Concerning **criminal responsibility** issues relative to the symptom of thought blocking, for all of the reasons previously discussed in the above, the forensic examiner will likely have great difficulty making a “mental state reconstruction” in the absence of the defendant’s recall for the legally relevant events.

Concerning Dissociative Disorders

In addition to being a puzzle for clinicians the dissociative disorders have created substantial difficulties for the legal system. A victim who cannot remember the circumstances of a crime cannot offer valuable testimony that might lead to a conviction, while amnesic defendants cannot assist in their own defense. Moreover, the presence of amnesia for a criminal act may suggest that the crime was committed in an altered state of consciousness in which normal processes of monitoring and control were inoperative--thus potentially qualifying the defendant for the insanity defense.

Unfortunately, the diagnosis of dissociative disorder is difficult to substantiate. Issues concerning malingering are always prominent with respect to the “battle of the experts” that accompany such cases. Even the structured clinical interviews are susceptible to faking -- and there is no way to tell for sure whether a particular suspect's claim of amnesia is genuine or simulated.

The legal problems associated with Dissociative Disorders are especially severe for the

forensic examiner. There have been a number of such cases reported since 1981 (Allison, 1981, 1982-1983, 1985), the most famous of these cases are those of Billy Milligan (State v. Milligan, No. 77-CR-11-2908, Franklin County, Ohio, December 4, 1978) and Kenneth Bianchi (State v. Bianchi, No. 79-10116, Washington Superior Court, October 19, 1979).

1. In 1978, Milligan was tried on charges of kidnap, robbery, and rape in Columbus, Ohio. He was diagnosed as a multiple personality with 10 (later raised to 24) alter egos, and found not guilty by reason of insanity (Keys, 1981). After inpatient treatment, and apparent fusion of his personalities, Milligan was released, established a child-abuse prevention agency, worked as a farmer, and developed a career as an artist.

2. Kenneth Bianchi was charged, along with his cousin, in the 10 "Hillside Strangler" rape-murders in Los Angeles, and alone in two similar cases in Bellingham, Washington. His case has been unusually well documented, being the subject of a series of journal articles by the opposing expert witnesses in the case (Allison, 1984; Orne, Dinges, & Orne, 1984; Watkins, 1984) and a two-hour Frontline documentary, "The Mind of a Murderer", broadcast on public television in 1984. According to his defense, the crimes were perpetrated by an alter ego, "Steve Walker", a claim that was supported by evidence of high hypnotizability. However, the claim was undercut by other evidence suggesting that Bianchi had simulated hypnosis, and especially, by inconsistencies in the self-presentation of the alter egos, psychological test evidence, and the lack of independent corroboration of the alter egos by people who knew him before he was arrested. Bianchi also had a great deal of background psychological knowledge, and had practiced psychotherapy under a false name and faked credentials (at one point in the proceedings he claimed that this was the work of a third alter ego, named "Billy"). Bianchi was convicted of eight counts of murder in the Hillside Strangler cases. He subsequently offered to testify against Buono, who was also convicted.

Commentary: Alcoholic Blackout—Does It Remove *Mens Rea*?

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Disorders of impulse control are commonly induced by alcohol. As Lady Macbeth said, “That which hath made them drunk hath made me bold; What hath quenched them hath given me fire” (Ref. 1, p 1231).

The report by van Oorsouw *et al.*² from The Netherlands re-emphasizes the prevalence of alcohol-induced blackouts in a community sample and suggests that the claim of amnesia during a criminal event may serve a “strategic purpose” in court. This raises questions that are of importance to the legal system in general and to the forensic psychiatrist in particular.

Blackouts “consist of a dense amnesia for significant events which have occurred during a drinking episode, which at the time outward behaviour perhaps seemed little disordered” (Ref. 3, p 595).

Although alcohol has been consumed for the duration of recorded history, and probably before, remarkably divergent opinions about drinking behavior are held by scientists and lay persons, perhaps reflecting positions that are more philosophical or religious than empirical. The tools of epidemiology, as used by van Oorsouw *et al.*,² are powerful aids in the validation of syndromes and provide clues to the etiology of disease. Recent research has demonstrated the varieties of genetic transmission of alcohol abuse and has helped to elucidate genetic/environmental interactions in the etiology of this major public health and social problem.⁴ Previous epidemiological surveys have reported that of college students who drink, more than 50 percent have experienced a blackout at some point in their lives.⁵ Criminal or dangerous behavior is not unusual during a blackout. In their sample, van Oorsouw *et al.*² found that 85

percent of blackout-claiming individuals had had a road accident, and White *et al.*⁶ found that 37.5 percent of their male sample had had fights, 25 percent had damaged or vandalized property, and 25 percent had had intercourse with someone they did not know.

Blackouts during alcohol intake are phenomena similar to episodes of “transient global amnesia,” a neurological syndrome that closely resembles a blackout, except that it occurs in the absence of alcohol, perhaps because of basilar cerebrovascular insufficiency (or during a migraine-equivalent episode). These episodes are not accompanied by drowsiness, inattentiveness, or impairment of consciousness, and speech and behavior may appear normal to an outside observer.³ White⁷ has described the mechanism for alcoholic blackouts as involving disruption of activity in the hippocampus. Ethanol inhibits NMDA (*N*-methyl-D-aspartate type of glutamate receptor), a receptor involved in synaptic plasticity and long-term potentiation (LTP).⁸

The differential diagnosis of the cause of amnesic episodes includes complex partial seizures, hypoglycemia, transient ischemic attacks, concussions and head injury, intoxication with sedatives, Korsakoff's syndrome, or encephalitis. Psychogenic amnesia may also be considered, but there is usually an emotional precipitant. These victims do not even remember their own names, and they may have amnesic periods lasting days or weeks.

The memory deficit of alcohol-induced Wernicke-Korsakoff syndrome, actually two different disorders, consists of a “global confusional state” in Wernicke syndrome, versus the purely anterograde and inconsistent retrograde memory disorder of Korsakoff syndrome, which does not include a confused state.⁹ Confabulation is a striking, but inconsistent,

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feature of Korsakoff syndrome, which may be mistaken for dissimulation or outright deception. It has been defined as: "The falsification of memory occurring in clear consciousness in association with an organically derived amnesia" (Ref. 10, p 31). The amnesia of a blackout is specific to a given period of alcohol intake, whereas the amnesia of Korsakoff syndrome is a chronic condition that may or may not be treatable with vitamin B-1.

The laws in most jurisdictions in the United States specifically disallow voluntary intoxication as a defense in criminal court, but involuntary intoxication, as by a prescribed drug or poisoning by others, is a valid defense. Are blackouts voluntary if not anticipated? Is a blackout the result of "voluntary" intoxication? Can a person have a blackout that was the unforeseen or unexpected consequence of drinking? Does that constitute an involuntary state? Chronic alcoholism may be interpreted as a disease and may therefore be involuntary.

Another essential question is whether *mens rea*, the mental state or quality of behavior required for the offense,¹¹ exists. Terms such as intentional, knowing, reckless, and criminally negligent¹² are used to define *mens rea*. If one is mentally unable to form intent or to understand that the proscribed behavior is wrong, then one is not guilty. Diminished capacity is a defense based on the inability to form specific intent because of a mental disease or defect, rather than knowledge of right or wrong, and may reduce the degree of the crime.¹²

Van Oorsouw *et al.*,² however, did not address the essential questions: does a blackout remove *mens rea*? Or does amnesia prove that the understanding of right or wrong was impaired? Also unanswered is the question of how one might validate a claim of amnesia without corroboration.

Does a blackout interfere with the will, in addition to the memory? Clearly, alcohol intoxication impairs self-control. Does a memory defect affect control? Current federal law has eliminated the second prong of the insanity statutes, which in Connecticut law states: "the defendant, because of a mental disease or defect, lacked the substantial capacity either to appreciate the wrongfulness of his or her conduct or *to control the conduct within the requirements of the law*" [emphasis added].¹³ One may therefore be innocent in a state court and guilty in a federal court, with exactly the same facts, because federal law has eliminated the control of conduct as an element.¹⁴ This

paradox should be resolved by informed legislation that takes into consideration current neuropsychiatric reality.

The question, then, is whether a defendant knew what he or she was doing and/or could control his or her actions during a blackout. Intent is an element of guilt in the concept of *mens rea*. Alcohol intake may therefore be either a mitigating factor or an aggravating factor, depending on the circumstances of the offense.

To have a blackout may require a certain amount of alcohol intake, but there is no particular level that reliably results in amnesia. Blackouts may occur at any time in the course of alcoholism, even during the first drinking experience.¹⁴

The degree of intoxication a person experiences depends not only on the blood alcohol level, but on the rate of increase of that level and the person's tolerance.⁹ Factors in the causation of blackouts include genetics.¹⁶ One may have a blackout without appearing drunk or impaired, or may be drunk and exercise bad judgment or control and not have a blackout. During blackouts, persons may carry on conversations, drive automobiles, and engage in other complicated behavior.⁹ Therefore even eyewitnesses may be unaware that a person is having a blackout.

How does one know if a person who cannot remember an event was able to understand it or could control behavior during the performance of an act? Can someone who appears normal to an observer be unaware of the nature and quality of an act? Every psychiatrist understands that there are persons who act on delusions or respond to the auditory hallucinations of the voice of God and are not responsible for their actions in a moral or ethical sense, but behavior when intoxicated is more problematic. The lay public on a jury may understandably be more skeptical if such a claim appears to be self-serving. Clearly, alcoholic intoxication dissolves the superego before it dissolves the power to act. People do things while drunk that they would never do when sober.

Peter Fenwick, writing in *Psychological Medicine*, has suggested that automatism is the absence of mind.¹⁷ His learned analysis distinguishes between "sane automatisms," which are caused by an external factor such as alcohol, and "insane automatisms," such as epilepsy or a brain tumor. Fenwick asserts that acts carried out during an alcoholic blackout are automatisms, and cites Redeski who observed that,

“alcohol provides an example of a process leading to automatism, and in a few instances defendants have been acquitted of offenses committed in a state of alcoholic automatism, recorded as total intoxication, as distinct from partial intoxication” (Ref. 18, p 187).

In conclusion, alcoholic blackouts are states of absence of mind that should be recognized by the law as exculpatory in cases in which they are the unanticipated result of social drinking, when intoxication was neither desired nor expected. The syndrome exists, and although any claim of mental illness or defect may be malingered or feigned, blackouts are a real entity that should be recognized by forensic experts.

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