Epilepsy and the Alternatives for a Criminal Defense

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EPILEPSY AND THE ALTERNATIVES FOR A CRIMINAL DEFENSE

Epilepsy has been long recognized but little understood. This lack of understanding has hampered attorneys faced with an epileptic client in formulating an appropriate criminal defense. In examining the pathological aspects of epilepsy, the author discusses the subtleties that make even a broad definition difficult. He then analyzes the alternative criminal defenses and their potential application to individuals manifesting various types of epilepsy.

I. INTRODUCTION

Although doctors at one time believed there was a significant relationship between epilepsy and violent criminal behavior, the clear weight of authority is now to the contrary. The epileptic is no more prone to crimes of violence than is the nonepileptic. Nevertheless, the various forms of epileptic seizures and their aftermaths produce conditions in which

1. Interest in the relationship between epilepsy and crime dates back at least as far as 1830 when clinicians turned increasingly to epilepsy as an explanation for crime after Esquirol delineated a condition referred to as "masked epilepsy," which was manifested by mental automatism rather than the "ordinary" grand mal epileptic seizure. J. ESQUIROL, MENTAL MALADIES: A TREATISE ON INSANITY 161-62 (E.K. Hunt transl. 1843). Public distrust of epileptics climaxed in 1891 with the theory of the "epileptoid criminal condition." C. LOMBROSO, THE MAN OF GENIUS (1891). See also G. LOMBROSO-FERRERO, CRIMINAL MAN, ACCORDING TO THE CLASSIFICATION OF CESARE LOMBROSO 16 (1911). Lombroso, after studying several criminals—a brutal rapist, an infamous robber, and a young soldier who slew eight of his comrades—concluded that epileptics had a natural criminal propensity. The identification of epilepsy with depravity can be found as late as the twentieth century. Note the reference to epilepsy by Bianchi, the Italian psychiatrist, in speaking of mania: "In the typical and severer form [of mania] (furor) . . . the desire for violent destruction [is] accentuated . . . resembling somewhat the excited and sinister mind of the epileptic." L. BIANCHI, A TEXT-BOOK OF PSYCHIATRY 766 (1906). Such generalizations, however, have been widely criticized.


the epileptic, though capable of action, is subject to mental disturbance ranging from mild confusion to complete unconsciousness.\(^4\) If the epileptic engages in conduct considered to be criminal during or immediately after a seizure, his mental condition may be an exculpatory circumstance, important to his defense.

Since epilepsy is not uncommon,\(^5\) an attorney faces a real possibility of representing an epileptic defendant. The most significant danger in such a situation is the tendency to oversimplify. Epilepsy is not always manifested by the dramatic grand mal convulsions familiar to the layman.\(^6\) Rather, it is a generic term for the numerous and diverse manifestations which comprise

\(^4\) See notes 34, 48, 70-72 infra and accompanying text.

\(^5\) Because of the many diverse forms of epilepsy, it is extremely difficult to accurately make any estimate of its incidence. The problem is further complicated by the fact that epilepsy is not necessarily a lifelong condition. Furthermore, many cases undoubtedly go unreported, owing to the social stigma still attached to the ailment despite medical advances in knowledge and treatment.

The number of epileptics in the United States has been estimated to be as low as 700,000. A. Noyes, MODERN CLINICAL PSYCHIATRY 261 (7th ed. 1968). As high and broad a range as 800,000 to 1,500,000 has also been suggested. Fabing & Barrow, MEDICAL DISCOVERY AS A LEGAL CATALYST: MODERNIZATION OF EPILEPSY LAWS TO REFLECT MEDICAL PROGRESS, 50 Nw. U.L. REV. 42, 43 (1955). An often quoted estimate is that one person out of every 200 is an epileptic. See, e.g., Glasgow, SOME MEDICO-LEGAL ASPECTS OF EPILEPSY, 36 N.Z.L.J. 277 (1960). A recent estimate that there are 1,860,000 epileptics in the United States, however, indicates that the malady is twice as prevalent. B. MILLER & C. KEANE, ENCYCLOPEDIA AND DICTIONARY OF MEDICINE AND NURSING 327 (1972).

\(^6\) At the mention of seizures, "one generally thinks of loss of consciousness, violent jerking movements, and foaming at the mouth—the behavior observed when a person has a grand mal

\(^1\) Cited in Smith, MEDICO-LEGAL FACETS OF EPILEPSY, 31 TEX. L. REV. 765, 767 n.7 (1953).

\(^2\) See, e.g., Glasgow, SOME MEDICO-LEGAL ASPECTS OF EPILEPSY, 36 N.Z.L.J. 277 (1960). A recent estimate that there are 1,860,000 epileptics in the United States, however, indicates that the malady is twice as prevalent. B. MILLER & C. KEANE, ENCYCLOPEDIA AND DICTIONARY OF MEDICINE AND NURSING 327 (1972).
the affliction. From a legal perspective, although the insanity defense appears readily available, there are a number of alternative defenses.

This Note will examine the pathological aspects of epilepsy and analyze its potential as a defense to a criminal action. It will detail the difficult task of establishing the disease's existence and its effect upon the defendant. The alternative criminal defenses and their potential application to epileptics will also be studied.

II. THE GENERAL NATURE OF EPILEPSY

A. Definition

Although the affliction has been recognized for thousands of years, there is as yet no comprehensive legal definition of epilepsy. Early cases characterized it as equivalent to what laymen termed "fits," and as a disease of the brain involving convulsions. In one rather colorful case, it was inaccurately described as "a state of insanity, during which the patient is deprived of reason and judgment; but he is at the same time deprived of sense and consciousness, and is wholly incapable of doing anything." The courts have also taken judicial notice of the fact that epilepsy is hereditary, though this is now disputed.

Statutes employing the term epilepsy have generally failed to define it. In Ohio an epileptic was once referred to tautologically as one having epilepsy. Possibly the best attempt at statutory definition, however, was made by the New York legislature in a now-defunct statute which stated that
an epileptic is "a person suffering from epilepsy as defined in medical practice, to such an extent that for his own welfare and the welfare of others, or of the community, he requires care and treatment." Such an open-ended definition may be unavoidable, and can be both realistic and useful in the case of epilepsy, since rapid advances in medical knowledge would soon render a rigid definition obsolete. Another solution has been to use a broader definition which encompasses other diseases as well as epilepsy.

Shifting the responsibility for defining epilepsy to the medical profession, however, as did the New York statute, may not solve the problem either. Throughout the last century neurologists have struggled to formulate a definition, but as yet no satisfactory description has been able to incorporate all the known data. The older medical dictionaries depicted epilepsy as a paroxysmal hereditary disease causing deterioration of the brain over a lengthy period of time. Significant portions of this definition, however, have been sharply disputed, modified, or discarded. Most doctors have come to agree that epilepsy should not even be considered a "disease," but rather a collection of symptoms.

Relying upon an earlier definition, Dr. Irwin Perr has formulated a broad description of epilepsy as "a disease or symptom complex characterized by recurrent alterations in the state of consciousness with or without muscular movements, accompanied by an electrical discharge in the brain—with certain exceptions." This definition recognizes both positions in the disease/symptom controversy. It includes mere "alterations" of conscious-

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16. N.Y. MENTAL HYGIENE LAW § 2(10) (repealed 1972). This section was replaced, however, and epilepsy would now apparently be subsumed under the definitions of mental disability and/or mental illness. Id. at § 1.05 (McKinney 1976).
18. E.g., OHIO REV. CODE § 4507.08 (Page 1972) ("any condition which causes episodic impairment of consciousness or a loss of muscular control"). See also note 16 supra.
19. See note 16 supra and accompanying text.
20. Glasgow, supra note 5.
24. Id. at 259. Rose, Criminal Responsibility and Competency As Influenced by Organic Disease, 35 Mo. L. REV. 326, 343-44 (1970). The justification for this change appears to be that since the cause, form, and severity of epileptic seizures can be so diverse and dissimilar, the title "epilepsy" can be retained only as a generic term for the manifestations which may evidence the condition.
27. See note 24 supra and accompanying text.
ness (as opposed to loss of consciousness) and allows for the presence or absence of convulsions. Such a broad definition appears necessary in order to encompass all the various forms and degrees of epilepsy. Overbreadth, however, will result in the inclusion of some nonepileptic conditions.\(^\text{28}\) In order to avoid this, Dr. Perr must recognize exceptions.

A concise definition, however, may create other problems. Dr. William A.N. Dorland, author of one of the most widely quoted definitions,\(^\text{29}\) stated that epilepsy is a “chronic, functional\(^\text{30}\) disease characterized by brief convulsive seizures in which there is loss of consciousness, with [a sequence of] tonic\(^\text{31}\) and clonic\(^\text{32}\) convulsions.”\(^\text{33}\) Whereas Dr. Perr’s definition is overinclusive, Dr. Dorland’s statement is underinclusive, since it would exclude conditions which certainly fall within the scope of epilepsy and yet which do not cause unconsciousness\(^\text{34}\) or convulsions\(^\text{35}\) (tonic or clonic).

Perhaps the best solution to the definitional problem will be to recognize that any definition is necessarily imprecise, and to attempt, instead, to describe the condition itself, classifying it according to its specific manifestations.

28. \textit{E.g.}, insulin shock, fainting, alcohol or drug intoxication, and hysteria.
30. It is conventional medical practice to classify diseases as either organic or functional. The former are those diseases with a demonstrable pathology; \textit{i.e.}, structural changes in the organs or tissues of the body. Functional diseases, on the other hand, are those without a demonstrable pathology; \textit{i.e.}, no anatomic, biochemical or physiological abnormality. \textit{Blakiston’s New Gould Medical Dictionary} 356, 358 (2d ed. 1956); \textit{Dorland’s Illustrated Medical Dictionary} 456, 460 (25th ed. 1974); \textit{Stedman’s Medical Dictionary} 405, 408 (23d ed. 1976).
31. \textit{Tonic Convulsion}: A muscular spasm, especially seen in generalized seizures, which is characterized by continuous tension or contraction, but not caused by atrophy or muscular shrinkage. \textit{Blakiston’s New Gould Medical Dictionary} 1121 (2d ed. 1956); \textit{Dorland’s Illustrated Medical Dictionary} 357 (25th ed. 1974); \textit{Stedman’s Medical Dictionary} 316 (23d ed. 1976).
33. \textit{The American Illustrated Medical Dictionary} 508 (22d ed. 1951).
34. See notes 70–72 infra and accompanying text.
35. Petit mal and psychomotor seizures may, in fact, evidence an absence of muscular activity. See notes 59, 70 infra.
B. Description and Classification

All forms of epilepsy share one characteristic. During an attack, the usual pattern (or "rhythm") of the electrical impulses flowing through the brain is disturbed by an abnormal electrical discharge. This fundamental abnormality led Gibbs, Gibbs, and Lennox (three of the foremost pioneers of electroencephalographic study of epilepsy) to describe epilepsy as "paroxysmal cerebral dysrhythmia." The abnormal discharge may involve all or part of the brain. Since the brain itself is divided into segments, each having its respective function, the abnormal discharge may, depending upon which area or areas are affected, result in a variety of distinct manifestations. This result partially accounts for the many diverse forms that the seizures may take.

In attempting to make order out of these diverse manifestations, it has been traditional to subject epilepsy to numerous classifications. Epilepsy is divided etiologically into two major classes: (1) symptomatic, or "acquired" epilepsy, for which there can be isolated a specific physical abnormality which irritates the brain and causes it to produce the irregular electrical activity; and (2) idiopathic epilepsy, for which no specific cause can be

36. The brain is made up of nerve cells. Each contains a cell body, from which nerve fibers radiate. Each nerve fiber, whose diameter may be only 1/5000th of an inch, may subdivide repeatedly, eventually establishing contact with the nerve fibers of other nerve cells. Nerve signals consisting of minute electrical impulses pass along the nerve fibers throughout the entire nervous system. These impulses, so far as is presently known, "constitute the physical basis of all nervous activity and are responsible for all movement, feeling, sight, hearing, speech and thought." Glasgow, supra note 5, at 277.

37. The electroencephalogram, or EEG, is a device that is capable of amplifying and measuring the electrical currents of the brain by means of electrodes placed on the patient's head. See notes 82–94 infra and accompanying text.

38. Gibbs, Gibbs & Lennox, Cerebral Dysrhythmias of Epilepsy, 39 ARCHIVES NEUROLOGY & PSICh. 298, 299 (1938). See also Gibbs, Gibbs & Lennox, Electroencephalographic Classification of Epileptic Patients and Control Subjects, 50 ARCHIVES NEUROLOGY & PSYCH. 111 (1943). The rather complex and profound terminology can be quite simply explained: a sudden and acute (paroxysmal) disorder of the rhythm (dysrhythmia) of the brain (cerebral).

Lennox has also stated: "Epilepsy is simply a paroxysmal dysrhythmia of brain potentials." Lennox, Epilepsy and the Epileptic, 162 J.A.M.A. 118 (1956). This definition, however, has been criticized on the grounds that "[i]t is misleading and might be confusing if used in courts, since there can be paroxysmal dysrhythmia without epilepsy." Perr, supra note 17, at 281 n.6.

39. Glasgow, supra note 5, at 278.
40. See notes 49–80 infra and accompanying text.
41. ENCYCLOPEDIA AND DICTIONARY OF MEDICINE AND NURSING 327 (1972).
42. Although Alpers' textbook on neurology lists 67 possible causes of symptomatic epilepsy, the list is probably not exhaustive. B. ALPERS, CLINICAL NEUROLOGY (5th ed. 1963). Some of the more common causes are: congenital defects and injuries, head injuries, cerebral arteriosclerosis, and neurosyphilis. For the relative incidences of the major causes, see Perr, supra note 17, at 283.
found, but which is by far the most common. Epilepsy is also classified, according to the extent the brain is affected, into (1) generalized seizures, affecting nearly the entire brain at once; (2) generalized seizures with focal onset, which begin in one area of the brain but ultimately spread into generalized seizures; and (3) focal seizures, attributed to a specific area or areas of the brain and usually disrupting the mental or physical functions controlled by the affected area(s). One aspect of focal seizures which may be particularly significant to any defense based upon epilepsy is that, depending upon the area of the brain affected, there may be no loss of consciousness.

Perhaps the most important classification of epilepsy, however, is that which delineates the various forms of seizures brought about by different electrical discharges. It is important to note that the various forms may appear alone, or in combination, and that individuals may be vulnerable to different types of seizures at different times. Though there are many forms of seizures, only four are of any significant medico-legal interest: grand mal, petit mal, psychomotor, and furor attacks.

1. Grand Mal Seizures

Grand mal seizures present the most dramatic manifestation of epilepsy. They occur in most cases of epilepsy, either alone or in combination with

43. The traditional idiopathic/symptomatic dichotomy may be losing support, however, because of increasing recognition of the many etiological factors which contribute to causing epilepsy. See note 42 supra.

44. A 1956 study indicated that it constituted approximately three out of four cases. Livingston, *Etiologic Factors in Adult Convulsions*, 254 NEW ENG. J. MED. 1211, 1215 (1956). A more recent study, however, implies that the incidence is approximately one out of three cases. Freytag & Lindenberg, *Medicolegal Autopsies of Epileptics*, 78 ARCHIVES PATHOLOGY 274, 282 (1964).

45. Such seizures are evidenced by an EEG discharge appearing simultaneously or successively from the electrodes over both the two hemispheres of the brain.

46. "Partial or focal seizures may spread to other parts of the brain and become generalized convulsive episodes or major motor seizures. This process, called secondary generalization, is recognized as a separate entity." Bruya & Bolin, *supra* note 6, at 391.

47. Signs and Symptoms: Applied Pathologic Physiology and Clinical Interpretation 635, 637, 638 (4th ed. C. MacBryde ed. 1964). The importance of such seizures is that they are often indicia of a localized pathology in the brain, and thus most frequently indicate symptomatic epilepsy. Perr, *supra* note 17, at 284–85, citing Livingston, *Etiologic Factors in Adult Convulsions*, 254 NEW ENG. J. MED. 1211 (1956). This should not be taken to mean, however, that there is any correlation between the idiopathic/symptomatic and generalized/focal dichotomies.

48. As, for instance, where only visual, auditory, or motor control is disrupted. See also notes 70–72 infra and accompanying text.

49. Variations in manifestations of epilepsy depend, most of all, upon whether the person is a symptomatic or idiopathic epileptic and, if the former, upon the nature of the causal factors involved. See text accompanying notes 39–43 supra.
other manifestations. If grand mal seizures are observed by a physician, they are conclusive evidence of epilepsy, since they differ symptomatically and pathologically from other conditions.  

The typical seizure is sometimes commenced by an aura which lasts several seconds and is followed immediately by the tonic and clonic phases of convulsion. As the spasms subside into a postconvulsive coma, the epileptic may sleep for one or two hours. Upon awakening, the individual is entirely amnesic as to the events of the entire period, excepting possibly the aura. He may also suffer from some degree of continuing confusion, ranging from slight befuddlement to complete automatism (mindless action). Such confused conditions are more

50. Because various symptoms are involuntary (e.g., absence of tendoneal reflexes, dilation of pupils), a trained observer can readily discern chicanery.

51. Aurae are experienced by approximately one half of the individuals who suffer grand mal attacks. Although commonly considered to be warnings that precede oncoming attacks, they are "not really . . . premonitions but the first manifestations of the neuronal discharge." A. NOYES, supra note 5, at 263.

Aurae may take different forms. Sometimes they are sensory, the most common being an unpleasant sensation in the epigastrium (i.e., the upper abdominal region overlying the stomach) which spreads upward through the body, and/or disturbances of the special senses (e.g., flashes of light, noises, or smells). The aurae may also be physical, taking the form of twitching or rigidity of certain muscles. BLACK'S MEDICAL DICTIONARY 73 (30th ed. 1974); BLACKSTON'S NEW GOULD MEDICAL DICTIONARY 125 (2d ed. 1956); STEDMAN'S MEDICAL DICTIONARY 142 (23d ed. 1976). However, the form of an individual epileptic's aura generally does not change. M. GUTTMACHER & H. WEIHOFEN, PSYCHIATRY AND THE LAW 161 (1952).

It has been stated more recently that aurae do not occur with true grand mal seizures (which are said to entail immediate loss of consciousness) but are associated instead with what is referred to as "secondary generalization," i.e., generalized seizures with focal onset. Bruya & Bolin, supra note 6, at 389. See also note 46 supra and accompanying text.

52. During the tonic phase, the epileptic suffers a sudden and complete loss of consciousness and, as he or she falls, the entire voluntary musculature goes into continuous (tonic) contraction, lasting between ten and twenty seconds. The muscles of the chest often contract at the same time as do those of the larynx; air is thereby forcibly expelled and results in the peculiar sound known as the epileptic cry. At first the face is pale, but as the muscles rigidly contract, the superficial veins become engorged. At the same time the chest becomes fixed and the aeration of the blood ceases, thus adding to the cyanosis (bluish-purple discoloration) of the face. During this tonic phase and for a variable period afterward, the pupils are dilated and do not react to light, and the corneal reflex is absent. The Babinski reflex is present, and the tendon reflexes are absent or decreased. During the general muscular contraction, the bladder is often emptied and occasionally the rectum.

A. NOYES, MODERN CLINICAL PSYCHIATRY 263 (7th ed. 1968).

53. During the clonic phase, the continuous contractions of the tonic phase subside into rapid alternating (clonic) contractions and relaxations. The contractions gradually become less frequent. "If at this time the tongue happens to fall between the teeth during a relaxation, it may be bitten when a clonic contraction follows. As respiration returns, the saliva, which could not be swallowed, may become intermixed with air and thus appears in a foam, perhaps tinged with blood." Id.

54. The coma is evidenced by rigidity of the pupils, absence of tendon reflexes, muscular flaccidity, cyanosis of the lips, and stertorous respiration (wherein breathing through the nose and mouth simultaneously results in a sound caused by vibration of the soft palate). Id.
common in men than in women, and may continue for several days following especially severe or repeated convulsions.55

2. Petit Mal Seizures

Petit mal seizures are usually restricted to childhood,56 but occur much more frequently than grand mal attacks.57 Although the details of petit mal seizures vary widely among individual epileptics, they are all characterized by an abrupt onset and termination, brief duration (5-30 seconds),58 and loss of consciousness.59 After the attack subsides, consciousness returns and the individual usually resumes what he or she was doing. There is no period of confusion,60 and most persons realize that a seizure has occurred.61 There is no memory, however, of what happened during the seizure.

3. Psychomotor Seizures

Psychomotor seizures (also known as “temporal lobe epilepsy” due to the focus of the electrical discharge)62 are undoubtedly the form of attack most

55. Continued convulsions constitute a condition known as grand mal status, or status epilepticus, which is extremely dangerous and often fatal.
56. Petit mal seizures usually begin between the ages of four and eight and, by the age of eighteen, tend to dissipate, often being joined or superceded by other forms of seizures, especially grand mal. It has been stated that two-thirds of all children experiencing petit mal seizures later develop grand mal. A. NOYES, supra note 52, at 265. A more recent study, however, would place this figure at less than 50%. Bruya & Bolin, Epilepsy: A Controllable Disease, 76 AM. J. NURSING, 388, 390 (1976).
57. Petit mal seizures have been known to occur as often as 10 to 500 times per day. Perr, supra note 17, at 284.
58. A. NOYES, supra note 52, at 265. The lapse of consciousness has also been said to last 10-15 seconds. Perr, supra note 17, at 284.
59. When the attack occurs, the individual, if standing, remains erect. “He may become pale, with his posture fixed, his eyes staring and expressionless; his attention cannot be secured; he may suspend his occupation and, through loss of muscle tone, drop whatever article may be in his hand.” A. NOYES, supra note 52, at 265. The lapse may also be accompanied by facial twitches and/or jerking of the limbs. MacBryde, supra note 47, at 636; A. NOYES, supra note 52, at 265.
60. Perr, supra note 17, at 284. An affected person, however, may have to reorient himself slightly to his previous activity. Bruya & Bolin, supra note 56, at 390.

Earlier writers claimed that there was a period of confusion. Mercier, in 1926, described what he termed “post-epileptic automatism,” which followed epileptic convulsions, “especially those in which the convulsion is but slight, and which are called petit mal.” C. MERCIER, CRIMINAL RESPONSIBILITY 116-18 (1926). Mercier may simply have been over-generalizing the phenomenon that follows grand mal seizures. More likely (and the accuracy of his description weighs heavily in favor of this conclusion), Mercier had stumbled across the then-unidentified psychomotor automatism. Such may also have been the case with some of Mercier’s predecessors (e.g., Esquirol, Prichard, and Bright). See Lennox, Phenomena and Correlates of the Psychomotor Triad, 1 NEUROLOGY 357, 360 (1951).
61. A. NOYES, supra note 52, at 265.
62. M. BLINDER, supra note 30, at 103; W. BROMBERG, CRIME AND THE MIND: A PSYCHIATRIC ANALYSIS OF CRIME AND PUNISHMENT 132 (1965); A. NOYES, supra note 52, at 267; Perr, supra note 17, at 84.
significant to criminal law. "Such seizures may produce abrupt personality change, confusion, inappropriate behavior for which the individual is partially or completely amnesic, impulsive acts of violence, and, rarely, seemingly well-thought-out crimes against property or persons." The attacks may also be evidenced by trance-like states that may last for several minutes, or for as long as several days. The manifestations of psychomotor epilepsy are so diverse, in fact, that they nearly defy inclusion within a single class of seizures. This problem prompted Dr. William Lennox to suggest a subclassification based primarily upon three major subdivisions termed the "Psychomotor Triad." The first subdivision, "psychomotor seizures," is characterized by distorted motor activity combined with amnesia for the events occurring during the attack. The second subdivision

63. M. Blinder, supra note 30.
64. These trances occasionally lead to misdiagnosis of the condition as schizophrenia or psychoneurosis. A. Noyes, supra note 52, at 267.
65. Id.
67. It is therefore extremely difficult to draw any generalizations about the condition, although it is known that it is more prevalent among adults than children. The incidence of psychomotor seizures, therefore, is higher in older persons, while that of petit mal seizures is higher in children. After a study of 1,900 office patients, Lennox reported:

As patients increase in age there is a progressive increase in the proportion with a history of psychomotor seizures; 9.7 per cent in patients less than five years of age and 34.1 per cent in those above the age of 40. Furthermore, the greatest increase took place in patients who had had convulsions also—usually before the advent of psychomotor trouble. Convulsions had been present in 3.9 per cent of those less than 10 years and in 26.5 per cent of those over 40 years of age.

Lennox, supra note 60, at 368. See also R. Durham, supra note 66; A. Noyes, supra note 52, at 267.

It is also known that the incidence of psychomotor epilepsy is approximately the same in males as in females. Lennox, supra note 60, at 368. There is also a higher incidence among epileptics who have been institutionalized. R. Durham, supra note 66.

68. Lennox, supra note 60, at 361-65.
69. Lennox, however, does not mean to imply that these seizures, as opposed to the latter two subdivisions, are the only true psychomotor attacks. Rather, the name seems to be based upon the characteristic manifestation of the seizures.

70. Dr. Lennox identified three further subgroupings that occur during the psychomotor seizure. The first of the subgroups is evidenced by tonic masticatory movements (e.g., increased muscular rigidity often accompanied by movement of the head and/or primitive automatisms, such as chewing, swallowing, and drooling). Attacks generally produce complete unconsciousness and amnesia, and must be distinguished from grand mal seizures. The second subgroup is typified by excessive muscular or psychic activity (impaired consciousness and partial amnesia). Consequently, it may often be confused with other conditions (e.g., hysteria, emotional outbursts, manic psychosis, criminality, psychotic personality). The third subgroup features an arrest of activity, often accompanied by staring, stupor, trance or sleep-like states, with partial or total loss of consciousness. The seizures may thus resemble petit mal attacks, but may be differentiated by the lack of the abrupt onset and termination characteristic of the petit mal seizure. Lennox, supra note 60, at 361-62.
of the Triad, "automatic seizures," is exemplified by automatisms.\footnote{71}

The final Triad subdivision suggested by Dr. Lennox is comprised of "subjective (psychic) seizures," in which, although consciousness may be somewhat disturbed, there is no impairment of memory: "Symptoms are told by the patient and not by the onlooker, being subjective rather than objective."\footnote{72} The respective incidences of these subdivisions were identified by Dr. Lennox,\footnote{73} but he warned that the entire classification was tentative and meant only for discussion and clarification, and not for compartmentalization of the various phenomena.\footnote{74} Later authorities, in fact, have associated the various manifestations of psychomotor seizures identified by Dr. Lennox

\footnote{71} Two subgroups are identified depending on the awareness and contact the victim appears to have with his or her surroundings. Seizures falling into the first subgroup reveal a distinct impairment of self-control. The automatisms may be ambulatory, or may be "repetitious manipulations, such as unbuttoning the clothes, or opening and shutting a purse. The speech is blurred or irrelevant; the person appears confused or intoxicated; his actions are inept, purposeless or inappropriate, usually a diversion from what he has been doing. Precision and thoughtfulness of speech or actions are lacking." Lennox, supra note 60, at 362-63. The second subgroup is perhaps the most intriguing, since the person may undertake complex activities and appear entirely normal and conscious. Both subgroups, however, are followed by complete amnesia for events which occurred during the seizures. Lennox, supra note 60, at 363.

Both subgroups, however, are also quite similar to other conditions, and care must be taken to assure accurate diagnosis. The first subgroup may resemble intoxication, hypoglycemia, sleep-walking, psychosis, and prolonged petit mal attacks (a condition known as petit mal status, wherein numerous seizures follow upon one another so closely as to create a lengthy, and extremely dangerous, condition). The second subgroup may resemble hysterical amnesia, fabrication, retrograde amnesia, and amnesia associated with concussion or fever.

\footnote{72} Lennox, supra note 60, at 364. The attacks, however, must be differentiated from other similar phenomena: neurosis, hysteria, psychosis, and imagination.

Three subgroups were distinguished by Lennox according to the subjective phenomena experienced during the seizure: (1) dream states, including feelings of unreality, illusion and déjà vu, (2) sensory hallucination, and (3) periods of mild disorientation and/or aphasia (impairment or loss of ability to comprehend, elaborate, or express words as symbols of ideas), during which the individual, although conscious of his or her surroundings, feels removed from them and unable to participate. Lennox, supra note 60, at 364-65. See also J. MacDonald, Psychiatry and the Criminal; A Guide to Psychiatric Examinations for the Criminal Courts 101 (1958); Falconer, Clinical Manifestations of Temporal Lobe Epilepsy and Their Recognition in Relation to Surgical Treatment, 2 Brit. Med. J. 939 (1954).

\footnote{73} Of 538 psychomotor seizures experienced by 414 office patients, Lennox traced the breakdown of incidences as follows:

<table>
<thead>
<tr>
<th>Psychomotor Seizures</th>
<th>43%</th>
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<tbody>
<tr>
<td>Tonic/Mascatory Movements</td>
<td>19%</td>
</tr>
<tr>
<td>Excessive Activity</td>
<td>5%</td>
</tr>
<tr>
<td>Arrest of Activity</td>
<td>19%</td>
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<tr>
<td>Automatic Seizures</td>
<td>32%</td>
</tr>
<tr>
<td>Contact Impaired</td>
<td>30%</td>
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<tr>
<td>Apparent Normality</td>
<td>2%</td>
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<tr>
<td>Subjective Seizures</td>
<td>25%</td>
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<tr>
<td>Dream States</td>
<td>7%</td>
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<tr>
<td>Hallucinations</td>
<td>9%</td>
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<tr>
<td>Disorientation</td>
<td>9%</td>
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Lennox, supra note 60, at 365.

\footnote{74} Id. at 361, 365-66.
with other nonpsychomotor forms of epilepsy. Nonetheless, Dr. Lennox's classification is still a valuable guide.

4. Epileptic Furor Attacks

Epileptic furor attacks merit special mention even though they are extremely rare and are often depicted as yet another manifestation of psychomotor epilepsy. The seizures consist of acts of uncontrollable violence which may be taken to brutal extremes. The attacks are epitomized by "suddenness, absence of premeditation and of precaution, and amnesia. . . . The extraordinary degree of discrimination and judgment displayed . . . often gives the patient's acts a misleading appearance of deliberation." It has been said that the condition is limited exclusively to men under 30 years of age. Any attempt at restraint is particularly provocative of violence.

5. Other Manifestations

The preceding discussion is not exhaustive of the manifestations of epilepsy. For the most part, however, the forms not mentioned are of little medico-legal interest. Moreover, many of the additional manifestations have been included within the general symptom ranges of the aforementioned categories.

III. ESTABLISHING EPILEPSY FOR A CRIMINAL DEFENSE

There are two prerequisites to establishing an epilepsy defense: first, it must be shown by medical evidence that the defendant is an epileptic, and second, a causal connection must be demonstrated between the epilepsy and the criminal conduct.

75. See, e.g., Rodin, Psychomotor Epilepsy and Aggressive Behavior, 28 ARCHIVES GEN. PSYCH. 210 (1973).
76. E.g., A. NOYES, supra note 52, at 267.
77. B. MALOY, NERVOUS AND MENTAL DISEASES 268 (1935).
78. M. BLINDER, supra note 30, at 103.
79. B. MALOY, supra note 77, at 268.
80. Other types of seizures exist, and one of the most notable is Jacksonian epilepsy, wherein convulsions begin in a localized area of the body and spread out from there, climaxing sometimes in a grand mal attack. ENCYCLOPEDIA AND DICTIONARY OF MEDICINE AND NURSING 327 (1927). See also B. MALOY, supra note 77, at 269–72; F. METTLER, THE MEDICAL SOURCE-BOOK 746 (1959). Two other manifestations, sometimes included under petit mal seizures, are also noteworthy: myoclonic seizures (typified by muscle spasms, usually in the arms, of varying intensity, with no loss of consciousness), and akinetic epilepsy (typified by falling spells caused by sudden muscular relaxation). Bruya & Bolin, supra note 56, at 388.
A. Demonstrating The Presence of Epilepsy

Prior to the development of the electroencephalogram (EEG) in 1929,\(^{82}\) it was difficult to determine whether a defendant was an epileptic. Although it is now known that some epileptics are subject only to infrequent and/or irregular seizures,\(^{83}\) it was a common practice in earlier times to delay trials so as to provide a lengthy period during which a prisoner could be observed. If, during the observation period, the prisoner experienced another seizure, that fact would then serve to substantiate his claim that he was subject to epilepsy.\(^{84}\) It is now possible, however, to establish epilepsy far more efficiently through the use of the electroencephalogram and the study of a person's prior clinical history.

The EEG is a device used to measure and classify the activity of the brain. "With electrodes placed on various portions of the head and connected to a suitable recording apparatus, it is possible to register an electrical pulse or electrical beat that originates in the nerve cells of the outer convexity of the brain."\(^{85}\) The electronically amplified impulse is then recorded, usually on paper tape.\(^{86}\) During an epileptic seizure an EEG records the abnormal patterns of spikes and waves caused by the varying electrical charges. A correlation has been found between certain recorded patterns and the various forms of the epileptic seizures.\(^{87}\) Epileptic patients may evidence such abnormal patterns of electrical activity even when they are not experiencing a seizure.\(^{88}\) This fact sometimes facilitates legally acceptable diagnoses without the necessity of examining the prisoner during a seizure.

The EEG, like other laboratory procedures, is of great significance in court. Since it is viewed as an objective test, free from the human error and bias lurking within expert opinion testimony, courts and juries are inclined to accept the results because of the ease of application and their belief in the diagnostic infallibility of a machine. "The record with its complex tracings lends itself to courtroom drama in the hands of an experienced and histrionic


\(^{83}\) Smith, Medico-Legal Facets of Epilepsy, 31 Tex. L. Rev. 765, 770 (1953).

\(^{84}\) Id.


\(^{86}\) Id. at 364.

\(^{87}\) No attempt will be made here to describe all the particular EEG abnormalities associated with epilepsy. When preparing an epilepsy defense, however, consultation with an expert is essential. A standard work on the subject is F. Gibbs & E. Gibbs, Atlas of Electroencephalography (1941). See also A. Noyes, supra note 52, at 260-66; Richey, Electroencephalography, in U. of Miami School of Medicine (Law Center), Medicine for Attorneys: Neurology 75-83 (1970).

\(^{88}\) Richey, supra note 87, at 78. But see text accompanying notes 90-91 infra.
attorney. In a trial it can become the focus of attention to the exclusion of clinical data."  

There are, however, many limitations to the conclusiveness of EEG measurements. First and foremost, the test is not absolutely diagnostic of either the presence or absence of epilepsy. Between seizures, when most testing is done, 15%-50% of epileptics will evidence no EEG abnormality, and 5%-10% will appear normal even during seizures. Conversely, 15%-20% of the nonepileptic population will show epileptic EEG patterns. Second, the conclusions derived from an EEG examination depend ultimately upon the quality of the machine, the technician who operates the EEG, and the doctor who interprets the results. Older machines are less sensitive than newer models and lack some of the more recent refinements. Misplaced electrodes, periods of drowsiness on the part of the subject, and the use of drugs may distort the results and invalidate the entire procedure. Finally, even if the examination is technically correct, the tracings themselves are meaningless in the absence of nonmechanical human interpretation. The conclusions, therefore, are subject to attack on these grounds, in much the same manner as are the results of other machines employed in modern criminal investigation, such as the polygraph and, to a lesser extent, the breathalyzer. These limitations are not, however, mentioned in an attempt to discredit the electroencephalogram. In cases of epilepsy, the EEG is particularly valuable as an aid to accurate classification and localization. It may also be of great assistance in determining the presence of epilepsy or in demonstrating its absence. It should not, however, be relied upon as the sole criterion, or as an infallible test; rather, the results should be thought of as corroborative evidence to substantiate clinical data.

In addition to an EEG examination, therefore, it is essential to obtain a detailed clinical history of the defendant. Examination by a physician will also be necessary. Furthermore, complete neurological and psychological examinations may be advisable in order to rule out the possibility that pseudo-epileptic symptoms are the result of one of the conditions which so closely resemble various forms of epilepsy.

89. J. MacDONALD, supra note 72, at 113.
91. Id. Blinder, however, writing in 1973 (fifteen years after Perr), has stated that this figure is only 10%. M. BLINDER, PSYCHIATRY IN THE EVERYDAY PRACTICE OF LAW § 24(h), at 104 (1973).
92. J. MacDONALD, supra note 72, at 114; Lennox, Marriage and Children for Epileptics, 10 HUMAN FERTILITY (1945).
93. Perr, supra note 90, at 288.
94. J. MacDONALD, supra note 72, at 113; Perr, supra note 90, at 288.
95. See notes 70-72 supra.
Ultimately, however, actual observation of a seizure by a qualified physician and a simultaneous EEG reading provide the most accurate diagnostic procedure. During grand mal seizures, for instance, the pupillary, corneal, and tendoneal reflexes will be absent. Such aspects cannot be simulated, and so indicate genuine epilepsy (barring the presence of some other disorder).

B. Demonstrating the Causal Connection

The mere fact that a defendant is epileptic, however, is insufficient to afford relief from criminal liability.\textsuperscript{96} Epileptics in remission have consistently been held criminally responsible\textsuperscript{97} and have sometimes been subjected to a rebuttable statutory presumption of lucidity.\textsuperscript{98} It is necessary, therefore, to prove not only that the defendant is an epileptic, but also that he or she was suffering from the effects of a seizure at the time the alleged crime was committed and that the allegedly criminal conduct of the defendant was causally connected with the effects of the seizure. Proving the requisite causal connection is a very difficult task.\textsuperscript{99} Even the fact that the defendant actually suffered a seizure at the time of the crime is insufficient unless it can be proven that the seizure deprived the defendant of control.


\textsuperscript{99} The basic problem in this situation is well illustrated by three case abstracts discussed by Dr. Seymour Halleck:

\begin{quote}
A forty-three-year-old man who had always been considered a respectable citizen was arrested for exhibiting himself. He had been walking along the lake front of a large city when he suddenly stopped and began to undress publicly. When brought to the police station, he could not remember what he had done and did not know why he had been arrested. He was sent to a mental hospital for a pretrial examination, where an electroencephalogram revealed an abnormal discharge from the left temporal area. Further neurological study suggested the presence of a brain tumor.

A twenty-five-year-old man had a long-standing history of assaultiveness. These actions took place mainly in bars and were associated with heavy drinking. Afterward he could never recall any details of his violence. He eventually became embroiled in an altercation in which he mercilessly assaulted and killed another man. Upon arrest he denied any recollection of the crime. Electroencephalographic study showed a seizure discharge in the temporal area.

A thirty-year-old man, apparently happily married, was arrested for attempting to force sexual attentions upon a ten-year-old boy. There was some indication that this behavior had occurred previously. During the offense his actions seemed carefully designed to avoid apprehension. He had a vague recollection of his behavior, was sure that he had done something illegal but could not give a rational explanation for his actions. An electroencephalographic study was suggestive of psychomotor epilepsy.

It is not difficult to appreciate the role of epilepsy as a causal factor in the first case. The patient's history plus the purposelessness of his actions supports the relevance of epilepsy as a necessary cause. In the second case, however, there would...
over his faculties.\textsuperscript{100} Since most seizures are of uncertain duration,\textsuperscript{101} it is difficult to show that the seizure or the resultant period of confusion coincided with the conduct in question.

It is prudent to consider that epileptics are entirely capable of committing premeditated and willful crimes during the periods between seizures. It is also advisable to consider the possibility of prevarication, since a history of epilepsy can be easily fabricated,\textsuperscript{102} and certain types of seizures can be simulated.\textsuperscript{103} Moreover, a patient who has had authentic seizures may simulate additional ones.\textsuperscript{104}

Various criteria have been suggested\textsuperscript{105} as aids in estimating the significance of an epileptic seizure as a causal element of a crime. Such factors include the following: Does the clinical and/or social history of the defendant reveal similar types of seizures and/or conduct in the past, in analogous situations, and was the effect on consciousness the same? Was the crime committed without adequate motive, or as a result of provocation of a degree less than that which would excite a normal, reasonable, man to similar conduct?\textsuperscript{106} Do the circumstances of the crime lead to an inference that it was

\textsuperscript{100} E.g., in Jacksonian epilepsy there may be no effect upon mental faculties. \textit{See also} notes 71–72 supra.

\textsuperscript{101} Although petit mal and grand mal seizures are characterized by sudden commencement, only the petit mal attack comes to an abrupt ending. Grand mal seizures often result in post-convulsive periods of confusion, which may last for unpredictable and indeterminate lengths of time. \textit{See} text accompanying notes 54–55 supra.

\textsuperscript{102} M. Blinder, \textit{supra} note 91, at 104.

\textsuperscript{103} In one case, a man charged with murder escaped full criminal responsibility by faking epilepsy after being instructed on the symptoms by an epileptic fellow prisoner. Hopwood & Snell, \textit{Amnesia In Relation To Crime}, 79 J. MENTAL SCI. 27, 30 (1933). It should be recalled, however, that grand mal attacks cannot be simulated well enough to deceive a qualified observer. \textit{See} text following note 95 supra.

\textsuperscript{104} J. MacDonald, \textit{supra} note 72, at 107.


\textsuperscript{106} Motive alone cannot conclusively establish a causal connection between a seizure and criminal conduct. There may seem to be a perfectly valid motive for conduct committed under the influence of a seizure, but there may be no apparent motive for a coldly calculated crime perpetrated during the most lucid of moments.
committed without premeditation or planning?\textsuperscript{107} Did the defendant fail to flee the scene of the crime and/or fail to attempt concealment of the crime?\textsuperscript{108} Is the defendant suffering from amnesia as to the events during the alleged seizure? (From a legal standpoint, this is often considered to be the most important factor of all).\textsuperscript{109} Was the conduct of the defendant out of character when compared to his previous history and general manner of behavior? What degree of guilt does the defendant possess, in the light of polygraph, Rorschach, and other psychiatric examinations?\textsuperscript{110} Does the type of epileptic attack alleged to have taken place correspond with the degree and duration of unconsciousness claimed? Does the type of epileptic attack alleged to have taken place correspond with electroencephalographic data obtained by testing the defendant?\textsuperscript{111}

Because these criteria may create more confusion than they dispel, they are not intended as clear-cut tests of causation but as guides to identify the type of factors that are important in establishing a causal connection between an epileptic seizure and a criminal act.

IV. THE ALTERNATIVES FOR A CRIMINAL DEFENSE

Just as the classifications of epileptic manifestations overlap, so do the criminal defenses available to the lawyer defending the epileptic defendant. Nevertheless, subtleties inherent in each warrant their separate review.

A. The Insanity Defense

Although insanity comes readily to mind in formulating an epileptic defense, much has been written stating categorically that epilepsy does not constitute insanity.\textsuperscript{112} This apparent inconsistency arises because, although

\textsuperscript{107} As with motive, however, the evidence of premeditation or planning may prove confusing, since nonepileptics most assuredly commit crimes with little or no premeditation or planning. Conversely, however, evidence of premeditation would appear to create a strong presumption against the validity of an epilepsy defense.

\textsuperscript{108} Caution must be taken when dealing with this subject as well since a nonepileptic may not attempt to conceal a crime, while an epileptic, upon discovering that he has committed one, may attempt to conceal it despite the fact that he may not be held criminally liable.


\textsuperscript{110} S. Halleck, supra note 99, at 165.

\textsuperscript{111} Recall, however, that epileptics are subject to various types of seizures in varying combinations.

\textsuperscript{112} See generally Ellis v. United States, 274 F.2d 52 (10th Cir. 1959); Gann v. Gough, 79 F. Supp. 912 (N.D. Ga. 1948); People v. Freeman, 61 Cal. App. 2d 110, 142 P.2d 435 (1943);
"the defense of insanity [is] one most proper to be urged," the condition of epilepsy does not itself imply continuing insanity. Rather, "epilepsy may cause insanity, but does not constitute it, and the two should not be confounded." During periods of remission, the epileptic is completely sane, and it is only the effects of a seizure which deprive him or her of any powers or faculties necessary for criminal responsibility.

The burden of production in an insanity defense is placed on the defendant, usually because of a presumption of sanity. The states differ, however, as to the amount of evidence required to meet the burden. Although the most commonly accepted rule is that the defendant must raise a reasonable doubt as to his sanity to meet his burden of production, certain minority rules require only "some evidence" or a "scintilla" of evidence. The quantum of evidence required will have a substantial effect upon the defendant's ability to demonstrate the existence of epilepsy and its causal connection to the criminal conduct. Once the burden of production is discharged, a presumption of insanity is raised in the federal and in about half the state jurisdictions, and the burden of production shifts. The prosecution thereafter assumes the burden of production and must prove sanity beyond a reasonable doubt. There is no shifting of the presumption in the remaining half of the state jurisdictions, which require the defendant to


114. Oborn v. State, 143 Wis. 249, 276, 126 N.W. 737, 748 (1910).
115. Id. See also note 97 supra and accompanying text.

Epilepsy is not to be regarded as a form of insanity in the sense that a person thus afflicted can be said to be permanently insane, for there may be little or no mental aberration in the intervals between the attacks; but epilepsy may cause insanity, and temporary insanity, in some cases, follows the paroxysms, varying in different instances from the slightest alienation to most violent mania, the latter form of the affection being known as "epileptic fury;" and, while it lasts, it may be considered as a state of insanity, during which the patient is deprived of reason and judgment.

44 C.J.S. Insane Persons § 2, at 29 (1945).

116. For cases in all jurisdictions, see H. Weihojen, Mental Disorder as a Criminal Defense 214 n.1 (1954).
117. See, e.g., Davis v. United States, 160 U.S. 469 (1895).
118. See, e.g., Lilly v. People, 148 Ill. 467, 35 N.E. 95 (1895).
establish insanity as an excusatory circumstance.\textsuperscript{122} The standard, however, is to require a showing of insanity by a preponderance of the evidence.\textsuperscript{123}

A further limitation on the insanity defense is that "the presumption of insanity will arise . . . only if the defendant can prove he was insane recently enough to warrant the inference that the insanity continued to the time of the crime."\textsuperscript{124} This may pose some problems, since not only may epileptic attacks be both infrequent and irregular,\textsuperscript{125} but the epileptic may be completely sane until the very moment of the attack. Furthermore, many jurisdictions have held unrealistically that the presumption of insanity will not arise unless the insanity is shown to be a permanent or chronic condition, as opposed to a temporary or recurrent one.\textsuperscript{126} "It is not at all clear, however, which forms of insanity will be deemed permanent and which temporary or recurrent."\textsuperscript{127} For example, the rule in a number of states is that if the defendant provides proof of epileptic seizures the insanity instruction must be given.\textsuperscript{128} In states which require that insanity must be a permanent condition, it might be plausible to argue that epilepsy is a chronic affliction\textsuperscript{129} marked by lengthy periods of lucidity, because, logically, a person who has epilepsy is epileptic even when he is not suffering a seizure. Such reasoning may explain why, in some of these jurisdictions, the requirement that insanity be a permanent condition is satisfied even if the defendant suffers only intermittent attacks, once the presumption that the defendant was sane at the time of the allegedly criminal acts has been rebut-
However, both this presumption and its opposite have been criticized as too broad: "The question on which the presumption should turn is whether this defendant, suffering from a disease having certain characteristics, was probably lucid at the time the crime took place." 

Although the standard of proof and the distribution of the burden of proof may be troublesome, the success of an insanity defense based on epilepsy may ultimately depend upon which test of insanity is applied. Four tests are employed in the United States today: the M’Naghten test, the irresistible impulse test, the product test, and the substantial capacity test.

1. The M’Naghten “Right-Wrong” Test

The “right-wrong” test was formulated in an 1843 advisory opinion in M’Naghten’s Case, and it remains the most prevalent test for insanity in the United States. To establish insanity under M’Naghten, it must be shown that, “at the time of the committing of the act, the party accused was labouring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing; or if he did know it, that he did not know he was doing what was wrong.” Although the precise wording of the test may vary from one jurisdiction to another, five major problems are encountered under almost all formulations.

Firstly, M’Naghten requires that the abnormal mental state be shown to have existed at the time of the commission of the offense. It is thus necessary to establish that the seizure and/or its consequences occurred coincidentally with the alleged criminal conduct. 

Secondly, it must be established that epilepsy is a “disease of the mind.” Since the test so strongly emphasizes the cognitive aspects of consciousness, some commentators have suggested that only certain forms of psychoses will

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132. A. Goldstein, supra note 124, at 117 (emphasis original).

133. 8 Eng. Rep. 718 (C.A. 1843). Although the modern version of the right-wrong test is associated with M’Naghten’s Case, where it was first stated, the test had been applied earlier. See W. LaFave & A. Scott, Criminal Law 275 n.7 (1972); Earl Ferrer’s Case, 19 Howell St. Tr. 886 (1760); Rex. v. Arnold, 16 Howell St. Tr. 695, 764 (1724).

134. More than half of American jurisdictions apply it as the sole standard. A. Goldstein, supra note 124, at 45; Moore, M’Naghten is Dead—Or Is It?, 3 Hous. L. Rev. 58, 74 (1965). Of the remaining jurisdictions, many retain M’Naghten, but supplement it with the irresistible impulse test.


136. See notes 96–111 supra and accompanying text.
qualify, and some jurisdictions have, therefore, refused to apply the test to epileptics.\textsuperscript{137} A more enlightened viewpoint, however, is that the M'Naghten test should be applied whenever any mental abnormality,\textsuperscript{138} including epilepsy, results in the mental impairment envisioned by the test.\textsuperscript{139}

Thirdly, interpretation of the word "know" has been the source of much controversy in the application of the M'Naghten test, and may create major obstacles to an epilepsy defense. If the term is defined narrowly, as critics of the test suggest it must be, the knowledge referred to is merely cognitive, intellectual awareness. Under such an interpretation very few manifestations of epilepsy would result in the requisite lack of cognition.\textsuperscript{140}

Presumably, the narrow interpretation of "know" would require that the subject totally lack cognitive awareness. Knowledge, so defined, would be absent only in the "totally deteriorated, drooling, hopeless psychotics of long-standing, and congenital idiots."\textsuperscript{141} The only forms of epilepsy which would render an individual so intellectually void would be generalized seizures resulting in grand mal convulsions or petit mal status. Neither of these conditions, however, is likely to result in actions of criminal significance, since the former is typified by violent convulsions and the latter by completely stuporous inactivity. The more usual case is when a person recognizes that, for example, he is holding a knife, that it is capable of killing a person, and yet he stabs that person without legal justification. In this case the defendant "knows" what he is doing in the cognitive sense.

Despite the fact that this restricted interpretation of knowledge has been forcibly argued, courts have seldom adopted it,\textsuperscript{142} but have preferred to


\textsuperscript{138} It has been held that M'Naghten's "disease of the mind" will include neuroses, organic brain disorder, and congenital intellectual deficiency. State v. Elsea, 251 S.W.2d 650 (Mo. 1953) (paranoia); State v. Hadley, 65 Utah 109, 234 P. 940 (1925) (senility); State v. Johnson, 233 Wis. 668, 290 N.W. 159 (1940) (feeblemindedness).

\textsuperscript{139} E.g., People v. Higgins, 5 N.Y.2d 607, 159 N.E.2d 179, 186 N.Y.S.2d 623 (1959); People v. Barberi, 47 N.Y.S. 168 (1896).

\textsuperscript{140} See A. Goldstein, supra note 124, at 49.

\textsuperscript{141} G. Zilboorg, Mind, Medicine and Man 273 (1943), quoted in A. Goldstein, supra note 124, at 49.

construe the term knowledge broadly. 143 The word “know” has been defined as “appreciate” or “emotionally understand.” 144 An individual is said to know only “if he ‘understands’ enough to enable him to judge ‘the nature, character and consequence of the act charged against him,’ or if he has the ‘capacity to appreciate the character and to comprehend the probable or possible consequences of his act.’ ” 145 Under this broad construction, epilepsy is far more likely to provide a viable defense than it could under the narrow cognitive construction, since “appreciation” of an act requires not only cognitive awareness but effective understanding as well. Both grand mal and, more importantly, certain forms of psychomotor seizures would most likely deprive an individual of the ability to appreciate the nature and quality of a criminal act. Furthermore, the confused state which follows the seizures might also deprive an individual of his capacity to “appreciate.”

A fourth problem with the M’Naghten test arises concerning the requirement that the defendant “know the nature and quality of the act.” 146 This phrase is usually taken to require an understanding of the physical nature and consequences of the act. 147 Such understanding is probably precluded by epileptic manifestations, including automatisms, but the manner in which “understanding” is defined will be highly significant. 148 Whether or not a confusional state during or after a seizure prevents understanding depends upon whether the degree of disorientation is sufficient to constitute


144. A. BROOKS, LAW, PSYCHIATRY AND THE MENTAL HEALTH SYSTEM 143 (1974).

145. A. GOLDSTEIN, supra note 124, at 49–50. Although the term “appreciate” has been adopted by the ALI Model Penal Code in its test for insanity, its meaning is not completely clear. For one interpretation, see People v. Wolff, 61 Cal. 2d 795, 800, 394 P.2d 979, 961–62, 40 Cal. Rptr. 271, 274 (1964).

146. The wording of this phrase varies. R. PERKINS, CRIMINAL LAW 860 (1969).

147. Rex v. Codere, 12 Crim. App. 21 (1916), an English case, is generally followed in this country. See A. GOLDSTEIN, supra note 124, at 51, 238 n.18 (citing trial transcripts).

148. The problem is well-illustrated by the customary example of epileptic automatism: A woman thus afflicted had an attack . . . while she was cutting bread and butter for her children’s tea. Finding the knife in her hand, she used the implement in her automatism, but she put it to a caricature of its normal use. She cut her own arm with it, and cut it so badly, that she was many weeks in hospital, and never recovered the full use of the limb. It was remarked at the time, that it was a mere accident that she wounded her own arm, and that it might easily have happened that she cut her child’s arm or throat instead. A year after the event, the alternative actually happened. Another woman, in similar circumstances, had an attack of the same nature; and actually did cut her child’s arm, so that it [sic] bled to death before she recovered consciousness.

C. MERCIER, CRIMINAL RESPONSIBILITY 117–18 (1926). To what extent did these women understand the nature and physical consequences of their actions? Were they cognitively aware of the physical fact that they were “cutting”? Did they know anything at all? The answers would appear to lie more in how the questions are defined than in the mental state of the subjects.
an inability to comprehend the "nature and quality of the act" (as that phrase is defined by a particular jurisdiction).

The fifth problem with the test is that the epileptic attack must have prevented the defendant from knowing that the act was wrong.\textsuperscript{149} In England the term "wrong" refers to legal wrong,\textsuperscript{150} but American courts disagree as to whether the term refers to legal or moral wrong.\textsuperscript{151} The distinction between legal and moral wrong may be important if the epileptic suffers the various manifestations of the subjective (psychic) seizures described by Lennox\textsuperscript{152} (such as hallucinations and disorientation) wherein the individual performs the acts due to the effects of delusions and confusion despite awareness that his conduct is improper. However, in most cases of epileptic seizure or convulsion the distinction will be largely irrelevant, since in all likelihood the individual will be totally unaware of any value judgment attaching to his actions.

In summary, the success of an insanity defense raised in a M'Naghten jurisdiction will depend more upon how the requirements of the test are construed by the jurisdiction than upon the form of epileptic seizure experienced by the defendant. Under liberal interpretations of the rule, most epileptic manifestations will involve sufficient loss of "appreciation" or "understanding" to preclude criminal responsibility, but in jurisdictions holding a narrower construction it may be impossible to establish insanity except when grand mal or petit mal seizures result in loss of cognitive capacity.

\textbf{2. The Irresistible Impulse Test}

In some jurisdictions,\textsuperscript{153} criticism that the M'Naghten test is based unrealistically upon solely cognitive criteria has led to the adoption of a supplement to that test. This "irresistible impulse" test considers volitional impairment. The rule allows a finding of insanity if a mental disease renders the defendant unable to control his actions and conform them to society's norms despite his awareness of the nature and wrongfulness of his conduct. In jurisdictions employing this supplemental rule, it is much more likely that epilepsy will be classified as a disease of the mind, since the cognitive

\begin{itemize}
  \item \textsuperscript{149} The wording of this part of the test sometimes suggests that the individual must not have known the nature or quality of his act \textit{and} not have known that it was wrong. People v. Ashland, 20 Cal. App. 168, 181, 128 P. 798, 804 (1912); Leache v. State, 22 Tex. App. 279, 311 (1886). Only one, however, and not both, are required, and it has been held to be error to instruct otherwise. Knights v. State, 58 Neb. 225, 78 N.W. 508 (1899); accord, State v. Moeller, 50 Hawaii 110, 433 P.2d 136 (1967).
  \item \textsuperscript{150} Regina v. Windle, [1952] 2 Q.B. 826.
  \item \textsuperscript{152} See note 72 \textit{supra} and accompanying text.
  \item \textsuperscript{153} W. LAFAVETE & A. SCOTT, \textit{supra} note 133, at 283 n.98.
\end{itemize}
restrictions of the M’Naghten test are not present. Although the irresistible impulse test has drawn much criticism, “irresistible impulse” is an apt description of many of the epileptic manifestations. The epileptic furor attack and postconvulsive confusional states are prominent examples. In such conditions, the individual may be aware of his actions, but he may be unable to alter them.

The irresistible impulse test may be most useful when it is doubtful that the epileptic defendant can be proven to have been totally unconscious and automatic. During an automatism, for example, the irresistible impulse test should be unnecessary because the epileptic’s total unawareness of his acts should shield him from criminal responsibility under the M’Naghten test. It is possible, however, that a jury would be more willing to believe that an individual could not resist an impulse to act than that he or she could perform complex activities while completely unconscious. In jurisdictions supplementing M’Naghten with an irresistible impulse test, it is advisable to argue both with equal vigor.

3. The Durham “Product” Test

In 1954, the United States Court of Appeals for the District of Columbia Circuit held in Durham v. United States, “that an accused is not criminally responsible if his unlawful act was the product of mental disease or mental defect.” This test was to improve upon the M’Naghten and irresistible impulse tests by taking account not only of the cognitive and volitional aspects of the defendant’s mental condition, but also of the broad range of mental illness itself. Like the tests which preceded it, however, the product test is ambiguous and has required further explication. “Product”

154. See text accompanying notes 140–48 supra.
155. Some critics complain that the test is too restrictive, since it does not cover the vast majority of cases in which an utter inability to control conduct is due to a condition which is neither an “impulse” (i.e., precipitous and unexpected) nor “irresistible” (i.e., totally uncontrollable). A. Goldstein, supra note 124, at 70–71.
156. One criticism of the terminology draws attention to this fact:

The term “irresistible impulse” is not a very good one. Irresistible implies that the person was absolutely unable to resist; impulse suggests an urge that is sudden and overwhelming but momentary. Such conditions exist—for example, in the irrational acts of confused epileptics, paretics, and schizophrenics—but they are rare. More common are urges which are not wholly irresistible, and which are not of sudden overwhelming force. Most exhibitionists, for example, have enough control not to yield to their impulse in the presence of a policeman. And if they were sure that they would be punished by torture or death, they would almost certainly restrain themselves. Nevertheless, they are the victims of urges so strong that most normal persons could not resist them under most circumstances.

157. See note 71 supra and accompanying text.
158. 214 F.2d 862 (D.C. Cir. 1954).
159. Id. at 874–75.
The term "mental disease or defect" is another source of difficulty. That term is now interpreted to include "any abnormal condition of the mind which substantially affects mental or emotional processes and substantially impairs behavior controls." Despite these efforts toward clarification, the Durham test has met with a consistent lack of success, resulting in its ultimate abandonment by the court which adopted it. It has been enacted into statute by only one state.

Where it is available, however, the test, on its face, seems ideally suited to an epilepsy defense, since seizures should certainly be considered abnormal conditions of the mind which substantially affect mental processes. Problems arise primarily in demonstrating that the conduct was caused by a seizure, since automatisms can so closely resemble normal, reasoned activity. Moreover, although the case law is sparse, there is some doubt whether the test would be satisfied by epilepsy. In Government of the Virgin Islands v. Smith, the defendant raised an epileptic seizure as a defense to a charge of involuntary manslaughter by automobile, claiming that he lacked the requisite mens rea due to the state of unconsciousness brought on by the seizure. The Third Circuit held that a statute dictating acquittal where mental illness caused a criminal act was not applicable, since "there was no evidence that the defendant's alleged epileptic seizure was an evidence or result of mental illness." Despite the defendant's apparent failure to present evidence that the seizure was a result of "mental illness," the court cited numerous authorities distinguishing epilepsy from insanity. Hence,

160. Carter v. United States, 252 F.2d 608, 617 (D.C. Cir. 1957). The "but for" definition has been criticized on the grounds that it places a nearly insurmountable burden on the prosecution since psychiatric reports will almost always support the defendant. "While occasionally one can say that an act was a product of mental disease, one can rarely if ever say that an act was not a product." Comment, McDonald v. United States: The Durham Rule Redefined, 51 Geo. L.J. 580, 583 (1963). The problem would seem to be much less troublesome in cases of epilepsy, but the causal connection between the seizure and the conduct will still be an issue. See text accompanying notes 96-111 supra.

161. McDonald v. United States, 312 F.2d 847, 851 (D.C. Cir. 1962). The requirement of behavioral consequences, moreover, is said to eliminate the problems inherent in the "but for" interpretation of "product."


165. 278 F.2d 169 (3d Cir. 1960).


167. 278 F.2d at 174.

168. The court's decision seemed to turn on the fact that the defendant claimed only that he lacked the requisite mens rea due to the state of unconsciousness brought on by the epilepsy. Id. at n.5.
in one of the few cases in which epilepsy was raised as an insanity defense in a jurisdiction utilizing a form of the product test, the lasting impression is that the court would not have considered epilepsy a mental illness even if the defendant had attempted to present evidence of a relation between mental illness and epilepsy.

4. The Substantial Capacity Test

The American Law Institute's Model Penal Code presents the most recent test for insanity:

(1) A person is not responsible for criminal conduct if at the time of such conduct as a result of mental disease or defect he lacks substantial capacity either to appreciate the criminality [wrongfulness] of his conduct or to conform his conduct to the requirements of law.

(2) As used in this Article, the terms "mental disease or defect" do not include an abnormality manifested only by repeated criminal or otherwise antisocial conduct.\(^{169}\)

This test has been widely applied\(^{170}\) and embodies the current trend.

The first paragraph of the substantial capacity test draws heavily upon its predecessors, yet manages to avoid many of their pitfalls. Both cognitive and volitional elements are recognized, but the terminology of the M'Naghten and irresistible impulse tests has been improved. One commentator has noted that the substantial capacity test "substitutes 'appreciate' for 'know,' thereby indicating a preference for the view that a sane offender must be

\(^{169}\) MODEL PENAL CODE § 4.01 (Final Draft, 1962). The term “wrongfulness” was inserted into the 1962 draft to indicate an option in terminology.

\(^{170}\) With the exception of the First Circuit, all United States courts of appeals have adopted the A.L.I. test: United States v. Brawner, 471 F.2d 969 (D.C. Cir. 1972); United States v. Herrington, 440 F.2d 1041 (8th Cir. 1971); Wade v. United States, 426 F.2d 64 (9th Cir. 1970) (substitutes "wrongfulness" for "criminality" and rejects the second paragraph); Blake v. United States, 407 F.2d 908 (5th Cir. 1969) (en banc) (substitutes "wrongfulness" for "criminality"); United States v. Chandler, 393 F.2d 920 (4th Cir. 1968) (en banc); United States v. Smith, 404 F.2d 720 (6th Cir. 1968) (rejects the second paragraph); United States v. Shapiro, 383 F.2d 680 (7th Cir. 1967) (en banc) (substitutes "wrongfulness" for "criminality"); United States v. Freeman, 357 F.2d 606 (2d Cir. 1966) (substitutes "wrongfulness" for "criminality"); Wion v. United States, 325 F.2d 420 (10th Cir. 1963) (en banc, cert. denied, 377 U.S. 946 (1964) (second paragraph not included, but not specifically rejected; substitutes "wrongfulness" for "criminality"); United States v. Currens, 290 F.2d 751 (3rd Cir. 1961) (eliminates the phrase "either to appreciate the criminality of his conduct or," and adds to the phrase "requirements of law" the words "which he is alleged to have violated").

The First Circuit applied the M'Naghten test in Beltran v. United States, 302 F.2d 48 (1st Cir. 1962), and expressed unwillingness to pass on a new test on the facts presented in Beltran. Id. at 52–53. In 1970, the Ninth Circuit stated: "Our research of reported decisions discloses no subsequent opinions on insanity tests by any federal court in the First Circuit." Wade v. United States, 426 F.2d 64, 64 n.1 (9th Cir. 1970).
emotionally as well as intellectually aware of the significance of his conduct. And it uses the word 'conform' instead of 'control,' while avoiding any reference to the misleading words 'irresistible impulse.' Most significantly, whereas the older tests were usually construed to require complete impairment of cognitive and/or volitional capacity, the A.L.I. test requires only lack of "substantial" capacity. As the draftsmen of the Code recognized, the old conception of insanity as an "all-or-nothing" proposition is totally unreasonable. This improvement may, however, have only a negligible effect on defenses based on epilepsy, since epileptic seizures are so often accompanied by such a degree of unconsciousness as to render the individual totally unaware and incapable of control. An epileptic experiencing post-convulsive confusion or a subjective psychomotor seizure may possess some degree of cognitive and volitional capacity. In such instances, the A.L.I. test's use of the word "substantial" may be highly significant, because the individual will not lack all cognitive awareness as required under M'Naghten, but will arguably lose the "substantial capacity" to appreciate his actions.

The second paragraph, limiting the definition of "mental disease or defect," does not appear to create any difficulties for the epileptic defendant. The limitation was intended to exclude only psychopathic personalities. Although rare cases of epilepsy may reveal themselves to the eye "only by repeated criminal or otherwise antisocial behavior," the abnormality is certainly "manifested" by other, more objective indicia, such as EEG patterns and characteristic physical reactions. An important factor in dealing with this section of the test, therefore, will be whether "manifested" is construed to include these objective indicia. Common sense, logic, and the comments of the A.L.I. drafters appear to support the position that epilepsy is not excluded by operation of the second paragraph.

171. A. Goldstein, supra note 124, at 87. See also text accompanying notes 137-45, 155 supra.

172. Model Penal Code § 4.01, Comment (Tent. Draft No. 4, 1955). This view of the problem ignores the vast-number of instances in which individuals are not totally incapacitated, and yet cannot be said to be insane.

[T]here are many cases of advanced mental disorder in which rudimentary capacities of cognition and volition exist but which clearly present inappropriate occasions for the application of criminal sanctions . . . . The danger is that if the test does not adequately reflect the reality, caprice and inequities in its administration will result.


173. See note 72 supra and accompanying text.


175. Both psychomotor automatisms, in which behavior is always identical (e.g., exhibitionism), and epileptic furor attacks may fit this description. Such manifestations, however, are extremely rare.

B. The Diminished Capacity Defense

Referring to the medico-legal aspects of epilepsy, one commentator stated in 1953 that "[a]ll defenses of mental irresponsibility, to be legally acceptable, must be raised under a plea of insanity."\textsuperscript{177} Although some states still view the relation between criminal responsibility and mental disease or defect as an all-or-nothing proposition,\textsuperscript{178} a growing number of jurisdictions have found this view to be overly restrictive and unrealistic. Consequently, they have allowed evidence of mental disease or defect, not amounting to legal insanity, to be considered in determining whether the mental elements essential to a crime were present in the defendant at the time the act was committed.\textsuperscript{179}

Unlike insanity, diminished capacity is not a complete defense; it usually serves only to reduce the degree of the crime. Thus, for example, if it can be shown that an epileptic seizure rendered the defendant incapable of premeditation or deliberation, a murder committed even with admitted intent will constitute only second degree murder. Moreover, if the defense of diminished capacity is allowed to negate specific intent in cases other than homicide, as it is in some jurisdictions,\textsuperscript{180} complete acquittal may result, since there may be no lesser degree of the offense. Defenses based upon epilepsy may, in fact, offer situations in which defense counsel may argue openly for complete acquittal (as opposed to "diminished" responsibility which coincidentally results in acquittal) on the grounds that the epileptic seizure resulted in such impairment of consciousness as to prevent any mental state, and therefore any crime. Most epileptic manifestations, in fact, will involve impairment sufficient to justify such a contention.

Even where an epileptic seizure results in a complete impairment of consciousness and would certainly appear to furnish a strong foundation for a plea of insanity, there are various tactical reasons for avoiding the insanity defense in favor of a plea of diminished capacity.\textsuperscript{181} Under the law of many

\textsuperscript{177} Smith, Medico-legal Facets of Epilepsy, 31 Tex. L. Rev. 765, 768 (1953).
\textsuperscript{178} See cases cited in Annot., 22 A.L.R.3d 1228, 1235 (1968).
\textsuperscript{180} This broad interpretation of the doctrine is applied in the following jurisdictions: Cal., Colo., Hawaii, Iowa, Kan., Ky., Md., Mich., Mont., Neb., N.H., N.Y., Ohio, Utah, and Wash. The following jurisdictions are unclear: Conn., Idaho, Mo., Nev., N.J., N.Y., Va., Wyo. and the federal courts. R. Cipes, supra note 179.
\textsuperscript{181} In England the diminished responsibility defense has been found to be not only supplementing the insanity defense, as was intended, but actually partly replacing it. Sparks, "Diminished Responsibility" in Theory and Practice, 27 Mod. L. Rev. 9, 31-32 (1964).
jurisdictions, a defendant who is acquitted . . . on a plea of insanity may be confined, with a conspicuous lack of due process, under maximum security in a mental institution for a period longer than he could have been imprisoned following conviction, and the treatment available is of extremely dubious quality. Moreover, the excellent success achieved in controlling epilepsy through the use of anticonvulsant drugs indicates that commitment is inappropriate in the vast majority of cases in which epilepsy is the sole abnormality. Consequently, where the alleged offense carries a relatively light sentence, it may actually be more desirable to negotiate a plea of guilty and face conviction than to be acquitted by reason of insanity. The diminished capacity defense, however, allows the epileptic defendant to avoid the threat of compulsory statutory commitment, yet it would probably not bar civil commitment if such treatment were in the best interests of the defendant and the community.

Another consideration in favor of a plea of diminished capacity over one of insanity is that jurors generally disfavor the insanity defense, finding it difficult to acquit a person who is admittedly responsible, at least in a physical sense, for a serious crime. This disinclination may be especially strong in cases involving epilepsy, since the defendant, who may be in total remission during the trial, was completely rational up until a short time before, and soon after, the commission of the alleged crime. Moreover, asserting the insanity defense may require sacrificing the opportunity to negotiate a plea, and if the insanity defense is unsuccessful the sentence will probably be longer than that which would have resulted from plea bargaining. The diminished capacity defense, on the other hand, may offer a greater likelihood of success, since it relieves the jury of the all-or-nothing determination of insanity, providing them with a compromise alternative.

The effect of the diminished capacity defense upon the possibility of complete acquittal is uncertain: the jury may, having been freed from the aforementioned dilemma, feel more comfortable in eventually agreeing upon acquittal, or they may take advantage of the availability of a compromise

182. See statutes collected in Shadoan, Raising the Insanity Defense: The Practical Side, 10 AM. CRIM. L. REV. 533, 537 n.9 (1972).
183. Id. at 536–37.
184. The institutions have been described as "penal holding compounds." Id. at 537–38 & n.10.
186. The diminished capacity defense has been criticized on the grounds that it will encourage juries that are unwilling to decide the insanity question to render compromise verdicts. See Note, Criminal Law: Defense of Insanity: Partial Responsibility: Adequacy of Present Law, 43 CORNELL L.Q. 283, 286 (1957). Many opportunities for compromise already exist, however, and juries undoubtedly take advantage of them. Ultimately, it must be questioned whether compromise is necessarily an improper method if it is the only manner in which the punishment can be made to fit the "crime" (or lack of it).
verdict to avoid acquitting a defendant whom they believe has committed a crime, regardless of his mental condition.

Another tactical reason for avoiding the insanity defense is that such a defense may require a special plea or special notification prior to being raised at trial and can be lost if such requirements are not met. Special pleadings or notice requirements, however, are seldom required for the diminished capacity defense.

Nevertheless, the diminished capacity defense does entail some risk. A jury faced with the compromise situation above may well opt to convict the defendant of a lesser offense. It may thus be anathema for a defendant who was completely unconscious at the time of his actions to accept any responsibility for a crime, diminished though the responsibility may be, when he would in fact be entitled to a finding of complete nonresponsibility.

The defense appears most valuable if the defendant acted in a postconvulsive confusional state or during a psychomotor or furor attack in which some degree of consciousness was retained. If the defendant has some memory of the events, it may also be useful to argue diminished capacity to avoid the occasional presumption that substantial recollection is inconsistent with the defendant's having suffered an epileptic attack.

C. The Involuntary Act Defenses

For an act to be considered criminal, there must be evidence of an actus reus (a voluntary act which is proscribed by law) and mens rea (a mental state that renders the actor blameworthy). Insanity and diminished capacity are defenses to criminal responsibility if mens rea was wholly or partially absent when the alleged crime was committed. An involuntary act defense negates criminal liability by removing the actus reus.

Defenses such as unconsciousness, automatism, and somnambulism rely principally upon the fact that the defendant's act must have been "voluntary" in order to constitute the criminal actus reus. A voluntary act has been defined as a physical movement that is a product of an individual's will. Alternatively, it has been defined as conduct "which would have been otherwise if the individual had willed or chosen it to be otherwise.

187. See H. Weihoisen, MENTAL DISORDER AS A CRIMINAL DEFENSE 357 (1954) for references to the statutes.
188. Id.
189. See note 109 supra.
191. In discussing these defenses, terminology can become a major problem because the foundations of the particular defenses are so similar that the defenses themselves tend to overlap. Distinctions between the defenses are largely semantical and, for purposes of this discussion, the defenses shall be treated under the heading of involuntary action.
There are those who believe that the term is indefinable, and also those who take the view that a voluntary act must be defined in terms of conditions which render an act involuntary.\textsuperscript{193}

The similarity of the "voluntary" aspect of the \textit{actus reus} to the "intentional" element of \textit{mens rea} has created some difficulty in distinguishing the various \textit{actus reus} defenses from the insanity defense.\textsuperscript{194} The problem is exacerbated in the case of epilepsy. Although the abnormality is clearly physiological in nature, it also affects the individual's mental condition. Furthermore, most epileptic manifestations will involve sufficient impairment of mental and volitional capacity to adequately support either type of defense. Consequently, epilepsy has at certain times been held to present an insanity defense\textsuperscript{195} and, at other times, an automatism/unconsciousness defense.\textsuperscript{196} Perhaps the best view is that "the two bodies of doctrine exist alongside one another, offering the defendant the opportunity to prove one or the other, or both."\textsuperscript{197} There are, however, reasons for avoiding the insanity defense which do not plague a defendant who invokes an involuntary act defense.\textsuperscript{198} Most importantly, a defendant found not guilty by reason of insanity may be confined within a mental institution, but "there is no procedure within the criminal process for retaining in custody persons acquitted because their acts were 'involuntary.'"\textsuperscript{199}

Although it would appear that total unconsciousness during an epileptic

\textsuperscript{193} W. LaFave & A. Scott, \textit{Criminal Law} 180 (1972). The last position mentioned has been adopted by the American Law Institute. \textit{Model Penal Code} § 2.01 (2) (Tent. Draft No. 4, 1955).

\textsuperscript{194} Illustrative is somnambulism. Although the leading case on the subject, Fain v. Commonwealth, 78 Ky. 183 (1879), totally ignores the defense of insanity, the same court stated in a later case that it could not understand how a showing of somnambulism "would constitute any defense other than that embraced in a plea of insanity." Tibbs v. Commonwealth, 138 Ky. 558, 567, 128 S.W. 871, 879 (1910); accord, Bradley v. State, 102 Tex. Crim. 41, 277 S.W. 144, 149 (Crim. App. 1925) ("Somnambulism is recognized as a species of insanity."). The commentators have also disagreed. Barrow, Fabing, and Weihofen consider somnambulism to be a form of insanity, whereas Glueck classifies it as merely a symptom of mental disorder. R. Barrow & H. Fabing, \textit{Epilepsy and the Law} 92 (1959); S. Glueck, \textit{Mental Disorder and the Criminal Law} 293 (1925); H. Weihofen, \textit{Mental Disorder as a Criminal Defense} 122 (1954).


\textsuperscript{196} E.g., Virgin Islands v. Smith, 278 F.2d 169 (3d Cir. 1960); People v. Nihill, 144 Cal. 200, 77 P. 916 (1904); People v. Freeman, 61 Cal. App. 2d 110, 142 P.2d 435 (1943).

\textsuperscript{197} A. Goldstein, \textit{supra} note 190, at 204.

\textsuperscript{198} See text accompanying notes 181–87 \textit{supra}.

\textsuperscript{199} A. Goldstein, \textit{supra} note 190, at 204. \textit{But see Model Penal Code} § 2.01, Comment 1 (Tent. Draft No. 4, 1955): "People whose involuntary movements threaten harm to others may present a public health or safety problem, calling for therapy or even for custodial commitment . . . ." The Code recognizes, however, that such persons should not be subject to criminal sanction, since "they do not present a problem of correction." \textit{Id}. 
attack will present a complete defense,\textsuperscript{200} it is still somewhat unclear whether confused and disoriented conditions short of unconsciousness will provide any relief from criminal liability under an involuntary act defense. The cases often speak in terms of “absence of will,”\textsuperscript{201} but it has been stated that “consciousness has not meant what it seems to say; that is, the individual, at least in [cases of somnambulism], need not be ‘out cold’ in order to claim the defense.”\textsuperscript{202} Accordingly, the defense will be especially significant to defendants who performed the allegedly criminal acts while suffering from the confusion which often accompanies subjective psychomotor seizures\textsuperscript{203} and postconvulsive periods.

The position of the Model Penal Code on involuntary actions is also worthy of note. The Code appears to take the position, alluded to earlier,\textsuperscript{204} that a voluntary act must be defined in terms of what it is not. It therefore provides specific exceptions to criminal liability in section 2.01:

\begin{itemize}
  \item[(1)] A person is not guilty of an offense unless his liability is based on conduct which includes a voluntary act or the omission to perform an act of which he is physically capable.
  \item[(2)] The following are not voluntary acts within the meaning of this Section:
    \begin{itemize}
      \item[(a)] a reflex or convulsion;
      \item[(b)] a bodily movement during unconsciousness or sleep;
      \item[(c)] conduct during hypnosis or resulting from hypnotic suggestion;
      \item[(d)] a bodily movement that otherwise is not a product of the effort or determination of the actor, either conscious or habitual.\textsuperscript{205}
    \end{itemize}
\end{itemize}

Sections 2(a) and 2(b) specifically rule out criminal liability for actions committed during convulsions and unconsciousness, the most common conditions resulting from epilepsy. Furthermore, the broad terms of 2(d) may be read to include the borderline conditions of confusion and disorientation. The exculpation granted by the conditions in section 2.01 is thoroughly separate from the Code’s discussion of insanity.\textsuperscript{206} Such separation indicates that the drafters of the Code consider these to be distinguishable defenses.

\textsuperscript{200}. See, e.g., ARIZ. REV. STAT. § 13–134(2) (1956); CAL. PEN. CODE § 26(5) (West 1972); IDAHO CODE § 18–201(2) (Supp. 1975); NEV. REV. STAT. § 194.010(6) (1973); OKLA. STAT. ANN. tit. 21, § 152(6) (West 1958); S.D. COMPIL. LAWS ANN. § 22-3-1(6) (1967).

\textsuperscript{201}. People v. Freeman, 61 Cal. App. 2d 110, 118, 142 P.2d 435, 439 (1943) (emphasis added).


\textsuperscript{203}. See note 72 \textit{supra} and accompanying text.

\textsuperscript{204}. See note 193 \textit{supra} and accompanying text.

\textsuperscript{205}. MODEL PENAL CODE § 2.01 (Official Draft, 1962).

\textsuperscript{206}. \textit{Id.} § 4.01.
In addition, the comment to section 2.01 emphasizes, as a rationale for exculpating involuntary conduct, the possibility that the cause of the convulsions or unconsciousness may be recurrent. The Code thus seems to take into account the possibility "that, in cases such as epilepsy, the reflexes, convulsions, and unconscious states may be such isolated occurrences in the life of the actor as to render unnecessary and unfair the consequence of an insanity verdict."

V. CONCLUSION

In dealing with epilepsy as a criminal defense, the attorney must utilize competent expert advice. The manifestations of epilepsy are innumerable and vary widely in intensity. A determination of the exact type and degree of the condition operative at the time of the alleged offense is crucial to a decision concerning the defense to be adopted. In formulating a defense, special attention must be paid to the appropriateness, in the case of the individual defendant, of the verdicts, penalties, and dispositions provided under each defense available. Most importantly, there would seldom be any reason to use only one defense. It would seem advisable, on the contrary, to argue in the alternative any and all defenses which are deemed to be appropriate.

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207. MODEL PENAL CODE § 2.01, Comment 3 (Tent. Draft No. 4, 1955).
208. Fox, supra note 202, at 660.