DANGEROUSNESS AND EXPERTISE

CHRISTOPHER SLOBOGIN†

INTRODUCTION ........................................... 98

I. PREDICTIONS OF DANGEROUSNESS IN PRACTICE AND IN THEORY ........................................... 109
   A. The Accuracy of Dangerousness Predictions .......... 110
      1. Clinical Prediction ................................ 110
      2. Actuarial Prediction .................................. 117
   B. A Comparison of the Clinical and Actuarial Prediction Processes ........................................... 119
   C. Summary ........................................... 126

II. AN EVIDENTIARY ANALYSIS OF DANGEROUSNESS PREDICTIONS ........................................... 127
   A. Are There “Experts” on Dangerousness? .............. 128
      1. The “Specialized Knowledge” Requirement ...... 129
      2. Relevance .......................................... 131
      3. The “Reasonable Reliance Test” ...................... 132
      4. Assisting the Trier of Fact .......................... 135
   B. Frye and Prejudice .................................. 137
   C. Letting the Defendant Choose ........................ 148
      1. What Type of Evidence May the State Use to Prove Dangerousness? .......................... 150
      2. What Types of Actions by the Defense Permit State Use of Clinical Predictions? .............. 154
      3. On What Issues May the State Unilaterally Use a Clinician? .................................. 156
   D. Summary ........................................... 157

III. A CONSTITUTIONAL ANALYSIS OF DANGEROUSNESS PREDICTIONS ........................................... 158
   A. The Due Process Perspective .......................... 159
   B. The Fifth Amendment Perspective ...................... 166

† Assistant Professor of Law, University of Florida. B.A. 1973, Princeton University; J.D. 1977, LL.M. 1979, University of Virginia.

The author wishes to thank Professors Richard J. Bonnie and John Monahan of the University of Virginia School of Law for their valuable assistance on this Article.
INTRODUCTION

The law of dangerousness is at an ironic stage of its development. In April 1983 the District of Columbia's Superior Court ruled in In re Wilson\(^1\) that psychiatrists may not testify about the dangerousness of individuals subjected to the civil commitment process. In June of that year the United States Supreme Court decided Jones v. United States,\(^2\) which strongly implied that psychiatric testimony on dangerousness is admissible in commitment proceedings for individuals acquitted by reason of insanity. Shortly thereafter, in Barefoot v. Estelle,\(^3\) the Supreme Court explicitly stated that a mental health professional may address the dangerousness of a capital murder defendant at her sentencing proceeding. The chasm between the lower court's decision and the Supreme Court's two opinions could hardly be more pronounced: the District of Columbia court found expert testimony predicting the probability of antisocial behavior too unreliable to support a hospital commitment of six months, while the Supreme Court held the same type of testimony sufficiently trustworthy to support not only prolonged commitment to a maximum security mental hospital but also the ultimate penalty of death.

The Supreme Court's stance reflects the accepted view among the courts; the Wilson ruling stands alone in its wholesale exclusion policy.\(^4\) The fact remains that sharp disagreement exists over the expertise of mental health professionals in predicting future behavior and over the usefulness of this expertise, assuming it exists, to the courts. In endorsing the findings of its own task force, the American Psychiatric Association has stated that "[p]sychiatric expertise in the prediction of 'danger-

---

4. One court has expressed misgivings about permitting testimony on dangerousness in capital sentencing proceedings. See People v. Murtishaw, 29 Cal. 3d 733, 767-75, 631 P.2d 446, 466-71, 175 Cal. Rptr. 738, 758-63 (1981), cert. denied, 455 U.S. 922 (1982). Such a display of judicial sensitivity is rare, however. See, e.g., Chambers v. State, 568 S.W.2d 313, 324 (Tex. Crim. App. 1978) (no special qualifications are necessary for a mental health professional to be an expert on dangerousness predictions in capital sentencing proceedings); Battie v. State, 551 S.W.2d 401 (Tex. Crim. App. 1977) (dangerousness testimony admitted over objection that it was speculative), cert. denied, 434 U.S. 1041 (1978). Even Murtishaw refused to prohibit such testimony in all capital cases. See Murtishaw, 29 Cal. 3d at 774, 631 P.2d at 470, 175 Cal. Rptr. at 762.
ousness' is not established. The American Psychological Association has come to much the same conclusion: "[T]he validity of psychological predictions of violent behavior, at least in the sentencing and release situations we are considering, is extremely poor, so poor that one could oppose their use on the strictly empirical grounds that psychologists are not professionally competent to make such judgments." Many legal commentators agree with this view and argue that expert testimony on the issue should be barred or severely limited.

In this Article, I take an intermediate position between complete exclusion and unquestioned acceptance of expert testimony on dangerousness. Specifically, "clinical" testimony regarding a person's future behavior should be admissible only if the defendant first seeks to use clinical testimony to show that she is not dangerous. If the defendant chooses not to rely on such testimony, then the state should be allowed to offer only proof of prior dangerous acts and "hard" actuarial data to prove future dangerousness. This view is based on two separate grounds, the first derived from an evidentiary/due process analysis, and the second from the fifth amendment's privilege against self-incrimination.

In developing this point of view, this Article will focus on "expert" assessments of "dangerousness to others" (as opposed to "dangerousness to self") in four types of proceedings: civil commitment hearings.

---


8 Clinical predictions are made by mental health professionals using traditional interviewing and history-taking techniques. See infra text accompanying note 47 for a more detailed definition.

9 Actuarial data are statistically combined to show the numerical probability that persons with certain characteristics will act in a certain way. "Hard" data, as opposed to "soft" data, are easily scored variables such as age, sex, or prior arrests. See infra text accompanying notes 48-49 for a more detailed definition.

10 The phrase "dangerousness to self" or its equivalent is found in all civil com-
"criminal" commitment hearings (commitment and release hearings for those acquitted by reason of insanity),\textsuperscript{12} noncapital sentencing hearings,\textsuperscript{13} and capital sentencing hearings.\textsuperscript{14} Much of what is said in this

commitment statutes, see Beis, \textit{State Involuntary Commitment Statutes}, 7 \textit{Mental Disability} L. Rep. 358 (1983), and is incorporated by reference in many criminal commitment statutes, see infra note 12. It usually refers to either suicidal behavior or an inability to care for one's basic personal needs.

\textsuperscript{12} All 50 states and the District of Columbia authorize involuntary hospitalization of those found to be mentally disordered and either "dangerous to others" or a "substantial threat to the welfare of society," or the equivalent. Beis, \textit{supra} note 10. Virtually all civil commitment statutes require medical examination and evidence on these two issues. S. \textit{Brakel} \& R. \textit{Rock}, \textit{The Mentally Disabled and the Law} 41-59 (1971).

\textsuperscript{13} According to a 1976 survey of statutes governing the release of insanity acquittees who have been committed to a state institution subsequent to their acquittal, the substantive standards for release in 28 states are identical to those found in the state's civil commitment statutes; in 18 states they are more restrictive than the state's civil commitment standards; and in five states the standards are less restrictive. See German \& Singer, \textit{Punishing the Not Guilty: Hospitalization of Persons Acquitted by Reason of Insanity}, 29 \textit{Rutgers L. Rev.} 1011, 1080-81 (1976). In only one of the latter five states is dangerousness to others not an explicit criterion for commitment. See Or. Rev. Stat. § 426.200 (1981).


\textsuperscript{14} The term "noncapital sentencing" is meant to encompass only the initial sentencing proceeding, not parole decisions. Many states have "special track" sentencing statutes that explicitly permit the sentencing authority to consider expert testimony on dangerousness in order to determine who falls within the terms of the statute. See generally G. \textit{Dix}, \textit{Special Dispositional Alternatives for Abnormal Offenders: Developments in the Law} 212 (1981). The most prominent of these special track laws are the so-called sexual psychopath laws. See generally \textit{GROUP FOR THE ADVANCEMENT OF PSYCHIATRY, PSYCHIATRY AND SEX PSYCHOPATH LEGISLATION: THE 30s TO THE 80s}, at 842-60 (1977). Although these statutes have recently come into disrepute, see, e.g., Guthman, \textit{MDSO Law: The Assumptions Challenged}, 4 Crim. Just. J. 75 (1980), 17 of the 30-plus states that originally enacted them still have at least a modified version on the books. American Bar Ass'n, \textit{Criminal Justice Mental Health Standards} § 7-8.1 (First Tent. Draft 1983) [hereinafter cited as \textit{Mental Health Standards}]. These statutes should be distinguished from habitual offender laws, which provide for enhanced punishment of those who have committed multiple offenses but which are not based on dangerousness assessments per se. See, e.g., S.D. Codified Laws Ann. § 22-7-8 (1979) (amended 1981).


\textsuperscript{14} The capital sentencing statutes of five states make proof of dangerousness an
Article may also apply to other settings and to determinations of one's propensity for self-harming behavior. Limiting the discussion to these four types of proceedings, however, will keep it within manageable boundaries and at the same time allow closer examination of those contexts in which expert assessments of dangerousness are most frequently requested and the type of predictions that have been most thoroughly researched.

Even within these parameters, the term "dangerousness" can take on a number of different meanings. For example, in the civil or criminal commitment contexts, it might refer to the likelihood that a person will cause emotional as well as physical injury to another person; the term might also encompass harm to another's property. In capital aggravating circumstance that will support the death penalty. See IDAHO CODE § 19-2515(g)(8) (Supp. 1984); OKLA. STAT. ANN. tit. 21, § 701.12 (West 1983); TEX. CODE CRIM. PROC. ANN. art. 37.071(b)(2) (Vernon 1981); VA. CODE § 19.2-264.4C (1983); WASH. REV. CODE ANN. § 10.95.070(8) (Supp. 1984). In two other states, nondangerousness is explicitly recognized as a mitigating factor. See COLO. REV. STAT. § 16-11-103(5.1)(g) (Supp. 1983); MD. ANN. CODE art. 27, § 413(g)(7) (Supp. 1983). Moreover, given the Supreme Court's insistence that the capital defendant be permitted to introduce any relevant mitigating evidence, see Lockett v. Ohio, 438 U.S. 586, 604-05 (1978); see also Woodson v. North Carolina, 428 U.S. 280, 303-04 (1976) (plurality opinion) (requiring consideration of character and record of offender during sentencing proceedings of capital trial), the defendant is presumably able to introduce testimony about nondangerousness in states whose statutes do not make specific mention of this factor.

Expert testimony on dangerousness has been used by both the state and the defendant in such proceedings. See Bonnie, Psychiatry and the Death Penalty: Emerging Problems in Virginia, 66 VA. L. REV. 167, 174-76 (1980); Dix, Participation by Mental Health Professionals in Capital Murder Sentencing, 1 INT'L J.L. & PSYCHIATRY 283, 287-301 (1978).

In addition to the four contexts described in the text, Shah has identified other stages of the legal process at which dangerousness assessments are made, including pretrial release hearings, juvenile transfer decisions, and transfer of prisoners to special prisons for disruptive offenders. Shah, Dangerousness: A Paradigm for Exploring Some Issues in Law and Psychology, 33 AM. PSYCHOLOGIST 224, 225 (1978). Arguably, the evidentiary and constitutional arguments made in parts II and III of this Article would apply to these contexts as well.

The scarce data on the ability of mental health professionals to predict accurately who will commit suicide suggest that at best a prediction of suicide is unlikely to be more than 20% accurate. See Morse, supra note 7, at 596 & n.132.

There have been at least seven studies on the ability of mental health professionals to predict dangerousness to others using clinical techniques. See infra note 50. In comparison, relatively few studies gauging the accuracy of clinical predictions of suicidal behavior have been conducted. See supra note 16.

See, e.g., HAWAII REV. STAT. § 334-1 (1976) ("dangerous to others" defined as "likely to do substantial physical or emotional injury on another"); KY. REV. STAT. § 202A.026 (1982) (commitment if individual presents a danger or threat of danger to others).

See, e.g., ARK. STAT. ANN. § 41-612 (Supp. 1983); HAWAII REV. STAT. § 334-1 (Supp. 1983). In Jones the Supreme Court stated, in the context of criminal commitment proceedings, "We do not agree with petitioner's suggestion that the requisite dangerousness is not established by proof that a person committed a non-violent
sentencing, on the other hand, the term usually refers solely to one’s propensity to cause serious bodily injury to another.\textsuperscript{20} In civil commitment the focus is on one’s potential for injurious behavior in the immediate future, while in the other three contexts long-term dangerousness is the primary consideration. Finally, within any of these settings, the precise likelihood of harm required to justify the intervention may differ depending upon the type of behavior predicted.\textsuperscript{21}

The way in which the dangerousness issue is framed varies with the context as well. With respect to civil commitment, the Supreme Court has ruled that the state must bear the burden of proving dangerousness by at least clear and convincing evidence;\textsuperscript{22} in the criminal commitment setting, on the other hand, the defendant may be required to disprove dangerousness by a preponderance of the evidence.\textsuperscript{23} Under capital sentencing statutes specifying dangerousness as an aggravating circumstance, the state typically must meet the “beyond a reasonable doubt” standard,\textsuperscript{24} while in ordinary sentencing the burden and standard of proof requirements are usually left unclear.\textsuperscript{25}

The implications of these and other distinctions will be emphasized where appropriate; in particular, part IV of this Article addresses

\textsuperscript{20} See, e.g., IDAHO CODE § 19-2515(g)(8) (Supp. 1984) (requiring “propensity to commit murder which will probably constitute a continuing threat to society”); TEX. CODE CRIM. PROC. ANN. art. 37.071(b)(2) (Vernon 1981) (requiring “probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society”); VA. CODE § 19.2-264.4C (1983) (requiring probability of “criminal acts of violence”); WASH. REV. CODE ANN. § 10.95.070(8) (Supp. 1984) (requiring likelihood of “danger to others in the future”).

\textsuperscript{21} See generally Katz & Goldstein, Dangerousness and Mental Illness, 131 J. NERVOUS & MENTAL DISEASES 404, 410-11 (1960).

\textsuperscript{22} See Addington v. Texas, 441 U.S. 418 (1979).

\textsuperscript{23} See, e.g., Clark v. State, 245 Ga. 629, 644-45, 266 S.E.2d 466, 477 (1980); D.C. CODE ANN. § 24-301(d)(2)(B) (1981). In Jones the Supreme Court held that where the acquittee had affirmatively established at trial his own insanity, there was a sufficient presumption of continuing mental illness and dangerousness to warrant automatic commitment of the defendant after the acquittal, but it avoided deciding whether this presumption would permit placing the burden on the defendant in release hearings.

\textsuperscript{24} The capital sentencing statutes of four states require that all aggravating circumstances be proved beyond a reasonable doubt. See IDAHO CODE § 19-2515(g) (Supp. 1984); TEX. STAT. ANN. art. 37.071(c) (Vernon 1981); VA. CODE § 19.2-264.4C (1983); WASH. REV. CODE ANN. § 10.95.060 (Supp. 1984). The Oklahoma statute places the burden of proving dangerousness on the state but does not specify a standard of proof. See OKLA. STAT. ANN. tit. 21, § 701.11-12 (West 1983).

\textsuperscript{25} See generally Jeffries & Stephan, Defenses, Presumptions, and Burden of Proof in the Criminal Law, 88 YALE L.J. 1325, 1352-53 (1979) (noting that to require proof beyond a reasonable doubt of all facts influential in sentencing would constitute a radical constitutionalization of sentencing procedure); Note, A Hidden Issue of Sentencing: Burdens of Proof for Disputed Allegations in Presentence Reports, 66 GEO. L.J. 1515, 1523-38 (1978) (reviewing the conflicting appellate decisions addressing the issue of which party should bear the burden of proving the allegations in presentence reports).
some of the unique concerns associated with dangerousness predictions in the civil commitment setting. Nevertheless, many of the points made in this Article are, I think, applicable to all four contexts, despite their differences. As one consequence of this assumption, the Article will use the term "dangerousness"—or, as a synonym, "violence-proneness"—without further explanation, trusting the reader to recognize that these terms are subject to variations in definition and proof requirements.

A preliminary issue to address is whether dangerousness is an appropriate legal criterion in any of these contexts. To date, attempts to eliminate it as a standard have been largely unsuccessful. The dangerousness provisions in some sentencing statutes and civil commitment laws have been found invalid on vagueness grounds; but this problem presumably can be redressed legislatively by specifying the type and probability of harm contemplated by the particular law. Similarly, if,

---


27 See, e.g., Suzuki v. Yuen, 617 F.2d 173, 176 (9th Cir. 1980) (finding part of the Hawaii commitment statute permitting involuntary hospitalization upon a finding of a threat of imminent danger to any property to be overbroad), aff'g in part and reversing in part 438 F. Supp. 1085, 1106 (D. Hawaii 1977); Bell v. Wayne County Gen. Hosp., 384 F. Supp. 1085, 1096 (E.D. Mich. 1974) (characterizing as "fatally vague and overbroad" a provision of the Michigan statute permitting commitment upon a judgment that a person is "mentally ill," without requiring that this person present a realistic threat of harm to herself).

28 Specifically, in enacting statutes that use dangerousness as a legal criterion, legislatures should decide what type of harm must occur (physical, emotional, to property) with what degree of probability (20%, 80%, more likely than not) and within what period of time (imminently, a year, indefinite) before the state can justifiably commit or sentence a person on the basis of her dangerousness. See A. BROOKS, LAW, PSYCHIATRY AND THE MENTAL HEALTH SYSTEM 67-82 (1974). Presumably each of these variables will change depending upon the context.

Additionally, as mentioned in the text, burdens and standards of proof will differ in each situation. Given the difficulty of proving the specific likelihood of a particular harm within a given time period, see infra text accompanying notes 50-83, the assignment of the burden of proof may be particularly important. Traditionally, the burden of proof on a particular issue has been assigned to the party most likely to have information relevant to the issue, or advocating the position least likely to be correct, assum-
as is increasingly becoming the case, legislatures define "dangerousness" as a likelihood rather than a certainty of violence in the future, the contention advanced by some\(^2\) that violence-proneness cannot be proved to the requisite degree also loses whatever force it once had. Assuming that the state cannot ever prove beyond a reasonable doubt, or even by clear and convincing evidence, that a person will act violently, showing by the requisite degree of certainty that a person is "more likely than not" to do so presents a far less problematic task.\(^3\)

ing no overriding policy factor dictates placing the burden on the other party. See Cleary, Presuming and Pleading: An Essay on Juristic Immaturity, 12 STAN. L. REV. 5, 11-13 (1959). Although it can be argued that the individual whose dangerousness is at issue is the one most likely to know what she will do in the future, many uncontrollable situational variables are unforeseeable by anyone, including the individual, yet may have a definitive effect on future behavior. See generally J. MONAHAN, THE CLINICAL PREDICTION OF VIOLENT BEHAVIOR 91-100 (National Institute of Mental Health Monograph 1981) (discussing the effects of variables such as family environment, peer pressures, job environment, and the availability of victims, weapons, and alcohol on violent conduct). Moreover, the state, because it is the party asserting that the individual is dangerous, is clearly advocating the least likely conclusion, given the low probability that a given individual is dangerous. See infra text accompanying notes 50-62. Finally, the state has traditionally borne the burden of proof when it attempts to deprive an individual of her liberty and the issue involved is an essential predicate of that deprivation. See generally Jeffries & Stephan, supra note 25, at 1365-70.

The conviction leading to a criminal commitment or sentencing hearing should not justify a presumption of dangerousness or a shift of the burden of proof to the defendant. See supra note 23 (discussing Jones). The fact of conviction by itself does not necessarily make the defendant's dangerousness more probable than not. See, e.g., infra text accompanying notes 56-58. On the other hand, the existence of the conviction does provide the prosecution with relevant evidence of past dangerousness, which may influence the factfinder in its favor. This evidentiary advantage is the only benefit that a conviction should afford the prosecution. Shifting the burden to the defendant unfairly permits the fact of conviction to be "counted twice."

Choosing the appropriate standard of proof is more problematic since it is an integral part of the value judgment that must be made in determining what substantive criteria will define dangerousness (that is, what probability of harm will justify aggravated treatment?). As the Supreme Court pointed out in Addington v. Texas, 441 U.S. 418, 424-25 (1979), the standard of proof is often largely symbolic. However, to the extent actuarial data identifying definitive probabilities of violent behavior can be developed, see infra text accompanying notes 77-83, the choice may be important, since the different levels of proof can be quantified as well (for example, beyond a reasonable doubt = 95% chance of future violent behavior; clear and convincing evidence = 75% chance; and preponderance of the evidence = 51% chance). Thus, if the relevant statute defined "dangerousness" as a finding by clear and convincing evidence (a 75% degree of certainty) that the individual will more likely than not (i.e., by a 51% margin) be arrested for an assaultive act, actuarial data showing a 38% probability of violent behavior (75% x 51% = 38%) would suffice to meet the state's burden.

\(^2\) A. STONE, MENTAL HEALTH AND THE LAW: A SYSTEM IN TRANSITION 33 (National Institute of Mental Health Monograph 1975); Cocozza & Steadman, supra note 7, at 1101.

\(^3\) See Monahan & Wexler, A Definite Maybe: Proof and Probability in Civil Commitment, 2 LAW & HUM. BEHAV. 37 (1978). Arguably, of course, it is senseless to talk about proving a given probability of future behavior, at least unless actuarial data are available. See supra note 28. Without such data, the most that can be proved with
With respect to sentencing in particular, the retributivist or "just deserts" movement, by seeking penalties premised on blameworthiness for past acts rather than on elusive determinations of future rehabilitative potential or violence-proneness, has had some success at sparking legislative efforts to remove dangerousness as a criterion for sentence enhancement. Yet constitutional challenges to the use of dangerousness as a sentencing criterion are not likely to succeed.

For instance, one might argue that enhancing a sentence on dangerousness grounds violates the proportionality principle implicit in the eighth amendment's prohibition against cruel and unusual punishment, since the resulting confinement is insufficiently related to the offender's prior criminal behavior. Or one could object to violence-proneness as a sentencing criterion because it relies on two questionable assumptions—that there is a class of offenders significantly more dangerous than other offenders and that this class can be readily identified—and therefore is not justified by any rational governmental motive. Yet the Supreme Court and the lower courts have been unwilling to use either a proportionality or substantive due process theory to invalidate sentencing policies predicated on dangerousness assessments, even when the penalty involved is death or represents a "special track" beyond any degree of certainty are the predicates for the prediction (such as recent violent acts).

Those who advocate determinate sentences, or sentences that leave very little or no discretion to the sentencing authority, are at least partially influenced by the research on dangerousness predictions. See N. Morris, The Future of Imprisonment 62-73 (1974); A. von Hirschi, Doing Justice: The Choice of Punishments 19-26 (1976).

This argument is particularly strong when a prediction that someone is dangerous is used to justify "special track" sentencing authorizing punishment beyond the prescribed statutory limits for the underlying offense. See Bonnie & Slobogin, The Role of Mental Health Professionals in the Criminal Process: The Case for Informed Speculation, 66 VA. L. REV. 427, 442-43 (1980); von Hirschi, Prediction of Criminal Conduct and Preventive Confinement of Convicted Persons, 21 BUFFALO L. REV. 717, 748-50 (1972). When the prediction merely enhances the penalty within legislated guidelines, the proportionality argument may lose much of its force. See Monahan, The Case for Prediction in the Modified Desert Model of Criminal Sentencing, 5 INT'L J.L. & PSYCHIATRY 103 (1982); see also infra note 36.

In Jurek v. Texas, 428 U.S. 262, 274-75 (1976), petitioners claimed that the Texas capital sentencing statute, which permitted the jury to find dangerousness as an aggravating circumstance supporting a death sentence, violated both the eighth and fourteenth amendments because future behavior was impossible to predict and because the dangerousness question, as formulated by the Texas statute, was overly vague. Seven Justices rejected these arguments. See id. at 274-76 (plurality opinion of Stewart, J., joined by Powell and Stevens, JJ.); id. at 277 (Burger, C.J., concurring in the
that normally imposed for offenders convicted of the same offense.  

judgment); id. at 277-79 (White and Rehnquist, JJ., and Burger, C.J., concurring in the judgment); id. at 279 (Blackmun, J., concurring in the judgment). Jurek's holding on this issue was affirmed in both Estelle v. Smith, 451 U.S. 454, 473 (1981), and Barefoot v. Estelle, 103 S. Ct. 3383, 3396 (1983); see also People v. Murtishaw, 29 Cal. 3d 733, 771 n.33, 631 P.2d 446, 468 n.33, 175 Cal. Rptr. 738, 760 n.33 (1981) (stating that Jurek "implies that state courts could constitutionally admit evidence concerning the likelihood of future criminal acts"), cert. denied, 455 U.S. 922 (1982); Moore v. State, 542 S.W.2d 664, 676 (Tex. Crim. App. 1976) (affirming death penalty and finding that dangerousness testimony was relevant to sentencing), cert. denied, 431 U.S. 949 (1977); Smith v. Commonwealth, 219 Va. 455, 471-82, 248 S.E.2d 135, 145-51 (1978), cert. denied, 441 U.S. 967 (1979). Implicit in all of these holdings is the assumption that statutes that authorize a death sentence on dangerousness grounds are not disproportionate, although no court has squarely addressed the issue. See id. at 482, 248 S.E.2d at 151 (rejecting disproportionality challenge, which occupied only two sentences in defendant's brief).

There seems to be little dispute that the sentencing authority may consider any relevant factors, including dangerousness, in deciding whether to enhance a sentence within the statutory maximum set for the present offense. See Note, Disproportionality in Sentences of Imprisonment, 79 COLUM. L. REV. 1119, 1161 (1979). More controversial, as noted supra note 33, is whether statutes may provide that dangerousness predictions can form the basis for sentences that extend beyond this maximum. Yet, to date, the courts seem to lean toward using the eighth amendment only to invalidate particular sentences, not the statutes themselves.

Thus, for instance, the Supreme Court has repeatedly upheld so-called habitual offender statutes against eighth amendment attacks. See id. at 1162. In Solem v. Helm, 103 S. Ct. 3001, 3016 (1983), the Court did find a life sentence without parole disproportionate to the offender's six prior nonviolent felonies. But neither the majority nor the dissent questioned the state's habitual offender statute authorizing such a sentence after four convictions. In his opinion for the majority, Justice Powell stated, "[A] State is justified in punishing a recidivist more severely than it punishes a first offender." Id. at 3013. Later he noted that "[n]o one suggests that [the South Dakota habitual offender law at issue in Helm] may not be applied constitutionally to fourth-time heroin dealers or other violent criminals. Thus we do not question the legislature's judgment." Id. at 3014 n.26.

Arguably, habitual offender statutes focusing on past crimes are less offensive from the proportionality perspective than statutes that enhance penalties beyond the maximum on other grounds. But the lower courts appear reluctant to use disproportionality review even when the enhanced sentence is based explicitly on a dangerousness determination rather than on the number of prior offenses. See, e.g., Director of Patuxent Inst. v. Daniels, 243 Md. 16, 38-43, 221 A.2d 397, 410-13 (upholding civil commitment statute for "defective delinquents"), cert. denied, 385 U.S. 940 (1966); see also People v. Feagley, 14 Cal. 3d 338, 375-76, 535 P.2d 373, 398, 121 Cal. Rptr. 509, 534 (1975) (sex psychopath statute violates cruel and unusual punishment stricture because it permits indefinite confinement of untreatable offenders, implying that were state to confine only treatable offenders, and were treatment available, no violation would occur); State v. Little, 199 Neb. 772, 784, 261 N.W.2d 847, 854 (statute similar to that at issue in Feagley upheld upon condition that an annual evaluation of the offender find "the possibility of treatment open to him"), appeal dismissed, 439 U.S. 809 (1978). See generally Dix, Special Dispositional Alternatives for Abnormal Offenders, in MENTALLY DISORDERED OFFENDERS: PERSPECTIVES FROM LAW AND SOCIAL SCIENCE 156-57 (J. Monahan & H. Steadman eds. 1983).

Neither the Supreme Court nor the lower courts have evidenced any desire to invalidate special track sentencing on fourteenth amendment grounds. See Minnesota ex rel. Pearson v. Probate Court, 309 U.S. 270, 274-75 (1940) (civil commitment statute for habitual psychopaths); Davy v. Sullivan, 354 F. Supp. 1320, 1329-30 (M.D. Ala.
Criminal and civil commitment statutes relying on dangerousness as a criterion are probably even less vulnerable to attack. Commitment has traditionally been premised on incapacitative as well as therapeutic rationales. Thus, dangerousness has become ensconced as a criterion for commitment. Moreover, just as in the sentencing context, the Supreme Court has rejected the argument that predictions of dangerousness are too unreliable to form the basis for commitment.

Some have argued that using the commitment process to incapacitate the untreatable is impermissible and that involuntary hospitalization should accordingly be based on therapeutic concerns alone. Such an approach has particular appeal in the civil commitment context, where the *parens patriae* tradition is strong. But it runs directly counter to recent developments in commitment jurisprudence, which move in the direction of making the state’s police power the primary justification for involuntary civil hospitalization. Many state statutes

1973) (criminal sexual psychopath statute).

37 See Jones, 103 S. Ct. at 3051 ("The purpose of commitment following an insanity acquittal, like that of civil commitment, is to treat the individual's mental illness and protect him and society from his potential dangerousness."). See generally Livermore, Malmquist & Meehl, *On the Justifications for Civil Commitment*, 117 U. PA. L. REV. 75 (1968) (common justifications for civil commitment are protection from potential dangers, protection from nuisance, and need for care and treatment).

38 See *supra* notes 11-12.

39 In Jones, 103 S. Ct. at 3049-50 n.13 (1983), the petitioner argued that the empirical research does not justify the conclusion that the commission of a criminal act means the offender will commit additional dangerous acts in the future. After acknowledging the uncertainties involved in predicting behavior and psychiatric diagnoses generally, the Court stated, "The lesson we have drawn is not that government may not act in the face of this uncertainty, but rather that courts should pay particular deference to reasonable legislative judgments." *Id.* at 3050 n.13. See also *In re* Harris, 98 Wash. 2d 276, 280-85, 654 P.2d 109, 111-13 (1982) (en banc) (statutory standard of dangerousness provides a constitutional basis for the involuntary commitment of an individual).


41 *Parens patriae*, literally "parent of the country," refers to the state's power and duty to care for dependent persons. See generally *Developments in the Law—Civil Commitment of the Mentally Ill*, 87 HARV. L. REV. 1190, 1207-22 (1974) (discussing the origins and nature of *parens patriae* and substantive due process limitations upon this power). Historically, it has been viewed as the primary justification for civil commitment, even when commitment has been premised on dangerousness to others. See Prochaska v. Brinegar, 251 Iowa 834, 838, 102 N.W.2d 870, 872 (1960). In criminal commitment, on the other hand, the therapeutic rationale has always been a secondary concern. See Goldstein & Katz, *Abolish the "Insanity Defense"—Why Not?*, 72 YALE L.J. 853, 864-70 (1963).

now require an overt dangerous act as a commitment predicate, a step some courts have indicated is necessary in order to avoid confinement based purely on mental illness or need for treatment. Thus, although a statute making mental incompetence and treatability the only criteria for civil commitment would probably pass constitutional muster, dangerousness to others is likely to continue as one of the primary considerations in such proceedings. And given the protective function served by criminal commitment, dangerousness is even less likely to disappear as a basis for confinement of those acquitted by reason of insanity.

Discussing these complex issues in depth is beyond the scope of this Article. My intent here is merely to indicate the possible assaults on dangerousness as a legal criterion and the slim likelihood of their success. One can only conclude that, for the foreseeable future, dangerousness will continue to be a criterion in the commitment and sentencing contexts.

If dangerousness is a legitimate legal issue, the question becomes how to prove or disprove it. The law has occasionally relied on lay testimony for this purpose, but in modern times the question of dangerousness has most often been the province of expert opinion by mental health professionals. The remainder of this Article considers whether that practice should be continued and, if so, under what restrictions.

The Article is divided into four parts. The first three focus on those contexts that call for long-term predictions of dangerousness—capital sentencing, noncapital sentencing, and criminal commitment. In each of these contexts the predictor is asked to assess whether the individual in question will behave violently at any time in the foreseeable future. Part I examines the research assessing the ability of mental health professionals to make such predictions and compares the accuracy of clinical predictions to the accuracy of predictions relying on actuarial data. It also identifies the major differences between clinical and actuarial prediction in terms of both the process of prediction and the types of factors relied upon. With this data as background, part II discusses the admissibility, under the rules of evidence, of expert testimony regarding the likelihood that a person will act violently in the future. Part II concludes that although such testimony should not be

---

43 Roughly 22 states explicitly make a recent overt threat or act a predicate to commitment on the grounds of dangerousness to others. See Beis, supra note 10.
44 See cases cited supra note 42.
45 See Appelbaum, Is the Need for Treatment Constitutionally Acceptable as a Basis for Civil Commitment?, LAW, MEDICINE & HEALTH CARE, Sept. 1984 at 144.
46 See generally Goldstein & Katz, supra note 41 (suggesting that the insanity defense permits confinement of those who might otherwise be acquitted on lack of mens rea grounds and allowed to go free).
automatically excluded from sentencing or criminal commitment proceedings, it should be admitted only if actuarial in nature or if introduced first by the defense. Part III then explores the admissibility issue from a constitutional perspective and arrives at similar conclusions based on an analysis of the due process and self-incrimination doctrines.

Finally, part IV briefly examines whether the analytical framework developed in the first three parts should apply to the civil commitment context, which is concerned with prediction of imminent violence rather than long-term dangerousness. It concludes, on practical and theoretical grounds, that the "defendant-first" approach is not appropriate when the situation involves emergency civil commitment, but that the rationales for rejecting the defendant-first model weaken as one moves out of the emergency environment.

I. PREDICTIONS OF DANGEROUSNESS IN PRACTICE AND IN THEORY

In order to discuss intelligently whether expert testimony on dangerousness should be admissible in sentencing and criminal commitment settings, it is necessary to examine both the research on the validity of long-term dangerousness predictions and the manner in which these predictions are made. This foray into the data will be brief, but it will suffice to provide some idea of the current "state of the art" so that its evidentiary and constitutional implications can be better understood.

There are two basic methods of predicting dangerousness. Clinical predictions are the type most often performed by mental health professionals and most often relied upon by courts. The clinical prediction process typically involves a personal interview of the individual whose dangerousness is in question. This interview is designed to determine the individual's current mental status and to obtain a life history, or at least a history of those events that the clinician believes to be relevant. In addition, third party sources, such as family, friends, and court records, may be consulted for further information concerning the person's present mental state and past behavior. Once this information is gathered, inferences are drawn—presumably based on the interviewer's professional education, training, and experience—concerning what the facts imply about the person's dangerousness.\(^{47}\) Contrast with the

\(^{47}\) See generally Guttmacher, A Review of Cases Seen by a Court Psychiatrist, in THE CLINICAL EVALUATION OF THE DANGEROUSNESS OF THE MENTALLY ILL 17 (J. Rappeport ed. 1967) (summarizing the clinical study of five persons who had been committed to and subsequently released from psychiatric hospitals sometime prior to
clinical technique is the actuarial method, which relies solely on variables known to correlate statistically with violent behavior. Unlike a clinical prediction, an actuarial prediction produces a numerical probability that an individual with given characteristics will act violently within a fixed time period. The first section below critically examines the studies on clinical and actuarial predictions and draws conclusions about the accuracy of each type of prediction. The second section then looks at the manner in which clinical and actuarial predictions are made and compares their advantages and disadvantages.

A. The Accuracy of Dangerousness Predictions

1. Clinical Prediction

The seven most commonly cited studies on the ability of mental health professionals to predict long-term dangerousness using clinical methods indicate that such predictions are far from reliable. Of those individuals predicted by experts to be violent in this research, anywhere from fifty-four to ninety-two percent were not violent, at least over the three- to five-year follow-up periods of the studies. Such high "false

---

48 See P. Meehl, Clinical Versus Statistical Prediction 3-6 (1954) ("The mechanical combining of information for classification purposes, and the resultant probability figure which is an empirically determined relative frequency, are the characteristics that define the actuarial or statistical type of prediction.").

49 A third method of predicting dangerousness is to combine the two techniques. See J. Monahan, supra note 28, at 85-89. Actuarial data could establish a "base rate" for violent behavior for a population with given characteristics. Clinical skills would then be used in attempting to discern whether a member of this particular group diverged from the group norm because of characteristics not included in the statistical survey. Unfortunately, no research has been conducted analyzing the accuracy of predictions performed in this manner. Moreover, for reasons that should become clear in part II, the admissibility question is best approached by keeping the two prediction methods conceptually distinct.

50 The studies and the false positive rates found in each are as follows: H. Steadman & J. Cocozza, Careers of the Criminally Insane (1974) (80%) (the “Baxstrom Study”); T. Thornberry & J. Jacoby, The Criminally Insane: A Community Follow-up of Mentally Ill Offenders (1979) (80%) (the “Thornberry Study”); Cocozza & Steadman, supra note 7, at 1098 (86%) (the “New York Study”); Kozol, Boucher & Garofalo, The Diagnosis and Treatment of Dangerousness, 18 Crime & Delinq. 371, 390 (1972) (65.3%; this finding, however, was later “corrected” by the authors of the study to reflect a lower false positive rate, see infra note 57) (the “Kozol Study”); Steadman, A New Look at Recidivism Among Patuxent Inmates, 5 Bull. Am. Acad. Psychiatry & L. 200, 209 (1977) (58.7%) (reevaluating an earlier study and obtaining a false positive rate of between 54% and 61%) (the “Patuxent Study”); Wenk & Emrich, Assaultive Youth: An Exploratory Study of the Assaultive Experience and Assaultive Potential of California Youth Authority Wards, 9 J. Research Crime & Delinquency 171 (1972) (92%) (the “Wenk Study”). A more recent Canadian study offers slightly more encouraging results, reporting a false positive rate of 44%. See Sepejak, Mennies, Webster & Jensen, Clinical
positive" rates have been characterized as the central problem in dangerousness prediction, since they represent the percentage of those who may be committed, have their sentences enhanced, or be put to death based on an erroneous assumption about their dangerousness. Because these rates tend to be so high, some have concluded that mental health professionals "cannot" predict who will act violently. Others have suggested that "flipping a coin" would yield more accurate results.

While it cannot be denied that mental health professionals using clinical prediction techniques are not very accurate at determining who is violence-prone, they are not nearly as inept at that task as many would suggest. In fact, knowledgeable clinicians are much better at predicting dangerousness than the random selection process suggested by the coin-flipping analogy.

To understand why this is so, it is helpful to focus at the outset on a study conducted in Massachusetts by Dr. Kozol and his associates. This investigation is chosen for illustrative purposes because it is usually cited as representative of clinical prediction at its best. Each prediction made in the study was based on independent examinations by at least five clinicians, a battery of psychological tests, and "a meticulous reconstruction of the life history [of the subject] elicited from multiple sources."
Four hundred and thirty-five male offenders evaluated in this manner were released into the community after being confined for various lengths of time. During the follow-up period, only eight percent of those predicted nondangerous (thirty-one out of 386) were found to have committed a serious assaultive act. Yet of those offenders predicted dangerous, 34.7% (seventeen out of forty-nine) were found to have committed such an act. More than sixty-five percent of the individuals identified as dangerous, therefore, were false positives. Given the results of this and other studies, it has become the accepted wisdom that at best only one out of every three clinical predictions of dangerousness will be correct.

On its face, this finding appears singularly unimpressive. But in evaluating what it means about the ability of mental health professionals to predict future dangerousness, one must take into account the fact that very few people commit violent acts. In the United States, for instance, only one person out of every 500 commits a seriously violent act (murder, rape, robbery, or assault) each year. Thus if one were to label a randomly selected American citizen dangerous, one would have one chance in five hundred of being right. Were Kozol and his associates able to maintain their one out of three accuracy rate when evaluating a random population, their predictions would thus be about 165 times better than chance.

As Cocozza and Steadman have pointed out, a significant number of the patients diagnosed as dangerous by Kozol's group may have been released into the community for up to four years longer than the majority of the group released as nondangerous. Cocozza & Steadman, supra note 7, at 1092. This would mean that the "false negative rate" (the percentage of those predicted nondangerous who were dangerous) claimed by Kozol is based on a much shorter follow-up period than the false positive rate, and therefore that the former rate (of eight percent) may be a relative underestimation. If true, this would not affect the finding with respect to the false positive figure, but it would increase the base rate for violent behavior for the group as a whole.

Kozol later claimed that the published results of this study understated the accuracy of the predictions because adjustments in the predictive criteria that evolved during the study, had they been applied, would have resulted in fewer individuals being labelled dangerous. The "corrected" figure, according to Kozol, should have been a false positive rate of 48.6%. See Kozol, Boucher & Garofalo, 19 CRIME & DELINQ. 555, 555 (1973) (letter to the editor). However, a second study using the improved criteria is needed to insure that this claim was not influenced by hindsight.

After reviewing five of the studies cited supra note 50, Monahan, in a widely cited statement, concluded, "[P]sychiatrists and psychologists are accurate in no more than one out of three predictions of violent behavior over a several-year period among institutionalized populations that had both committed violence in the past (and thus had high base rates for it) and who were diagnosed as mentally ill." J. MONAHAN, supra note 28, at 47-49 (emphasis omitted).

See UNITED STATES DEP'T OF JUSTICE, UNIFORM CRIME REPORTS 168 (1982). The figure stated in the text is based on the number of arrests for these crimes.
Of course, most of the dangerousness studies, including Kozol's, do not involve randomly selected populations. They usually focus on male offenders, a group that has a much higher base rate for violence than the population as a whole. In Kozol's group, for example, the base rate was one out of nine; forty-eight of the 435 offenders studied committed violent acts during the time period of the study.\textsuperscript{60} Even so, Kozol and his associates produced predictions that were three times better than chance.\textsuperscript{61} Although their absolute accuracy was low, their relative accuracy could be called commendable.\textsuperscript{62}

Admittedly, Kozol's study supposedly represents clinical prediction of long-term dangerousness at its best. But it does not stand alone. Of the six other studies, two reported even better predictive accuracy, not just in terms of lower false positive percentages—which could merely

\textsuperscript{60} Kozol, Boucher & Garofalo, supra note 50, at 390.
\textsuperscript{61} Thus, flipping a coin would not yield more accurate results than those achieved by Kozol's clinicians, despite Ennis and Litwack's suggestion to the contrary. See supra note 53. In a group of ten, the "coin flip" method would on average produce five predictions of dangerousness and five predictions of nondangerousness. If the base rate for this group were one out of ten (similar to the base rate for Kozol's group), at least four of the dangerousness predictions would have to be wrong, yielding a false positive rate of at least 80%. Such a figure is considerably higher than that achieved by Kozol. If the one dangerous person in the group were misdiagnosed, the false negative rate would be 20% (because one out of the five predicted to be safe would not be), also considerably higher than Kozol's 8.6% figure. But see supra note 56.

More importantly, the assumption that most lay people would make upon hearing the flip-of-the-coin analogy—that dangerousness predictions are far worse than "chance" because they are wrong one out of three times rather than one out of two times—is clearly wrong. That assumption would be correct only if the relevant base rate for violent behavior were one out of two, which is not the case for most populations.

Ennis and Litwack's coin-flipping analogy is particularly specious given that they were writing about short-term predictions of dangerousness, which are probably even more accurate than the types of predictions discussed in the text. See infra notes 263-64 and accompanying text.

\textsuperscript{62} It has often been pointed out that merely predicting everyone to be nondangerous will produce a better overall accuracy rate than clinicians can achieve. Using the Kozol study's group as a sample population, this "blanket prediction method" would yield a success rate of 88% (since 386 out of the 435 were nondangerous), as opposed to Kozol's 86% accuracy rate (355 correctly predicted nondangerous and 17 correctly predicted dangerous, for a total of 372 correct predictions out of 435). Moreover, of course, this "blanket prediction method" completely eliminates the false positives. But it also produces 18 more false negatives than did the Kozol study. The fact that this "prediction method" improves the overall accuracy rate does not go to the issue of whether mental health professionals are able to predict dangerousness, but to the issue of how much and which type of error we are willing to tolerate as a society. A finding that everyone will be nondangerous may not be tolerable when at least some of those who will act violently can be correctly identified. See generally Walker, Dangerous People, 1 INT'L J.L. & PSYCHIATRY 37, 41-42 (1978) (arithmetical rules finding persons all dangerous or all nondangerous will not make moral decisions for us; the most that arithmetic can do is give us some idea of the magnitude of the risks involved in each of the choices).
reflect the fact that the populations studied had higher base rates for violence—but in terms of the proportionate margin over chance. On the other hand, the four remaining studies evaluating the ability of mental health professionals to predict long-term dangerousness obtained extremely high false positive rates, ranging from eighty to ninety-two percent; the predictions, therefore, were not appreciably better than chance.

One reason for the relative accuracy of groups like Kozol's is their degree of expertise. The mental health professionals in Kozol's study were very familiar with violent patients and conducted comprehensive evaluations based on a systematic approach to prediction. The same cannot be said for all professionals involved in the assessment of dangerousness. It is unlikely that more than a few clinicians have the experience and mastery of theory to produce predictions even of the low absolute accuracy achieved by Kozol and his associates.

It should also be noted, however, that each of the four studies that reported extremely high false positive rates suffered from serious methodological flaws that may have led to at least some underestimation of

---

63 The Patuxent study, see Steadman, supra note 50, involved 296 individuals assessed by an interdisciplinary team composed of staff members from the Patuxent Institution for Defective Delinquents. The study reported a false positive rate of 59%, which, given a base rate for violence of close to 34%, meant that the staff's predictions of dangerousness were only 1.2 times better than chance (41% — the true positive rate — over 34%). See id. at 209. The Canadian study, see Sepejak, Menzies, Webster & Jensen, supra note 50, involved the evaluation of 364 individuals, also by an interdisciplinary team. The false positive rate in that study was 44%, but the base rate was extremely high (roughly 45%), and the predictions were therefore approximately only 1.24 times better than chance (55%/45%). Id. at 176-77.

It is important to note, however, that because the base rate for violence in both studies was less than one out of three it would have been impossible for the clinicians to achieve predictive accuracy three times better than chance, as Kozol's group did. Even if they had been perfectly accurate in predicting dangerousness, at best the Patuxent group could have been only 2.9 times better than the base rate and the Canadian group only 2.2 times better than the base rate, whereas Kozol's group could have been nine times better than chance. Proportionately, the margin over chance as a ratio of a perfect score was .41 (1.2/2.9) for the Patuxent group and .56 (1.3/2.2) for the Canadian group, as compared to only .33 (3/9) for Kozol's group.

64 See H. Steadman & J. Cocozza, supra note 50; T. Thornberry & J. Jacoby, supra note 50, at 196-97; Cocozza & Steadman, supra note 7, at 1098; Wenk & Emrich, supra note 50, at 171.

65 This is because the base rate for the sample population in each of these studies hovered around 10%; thus the chance that any one person picked at random from one of these populations would be dangerous was one out of ten, a proportion virtually identical to the success rate achieved in these studies.

66 Those conducting the evaluations had staffed the program at the Massachusetts Center for the Care and Treatment of Dangerous Persons since its inception in 1959. The predictions were made in the late 1960's. See Kozol, Boucher & Garofalo, supra note 50, at 384.
predictive success. In two of them,\(^7\) for instance, it is unclear whether any clinical prediction of dangerousness was even made. Predictions by mental health professionals were apparently assumed from the fact that the "criminally insane" offenders involved in the research continued to be treated as if they were considered dangerous (that is, they continued to be confined). The authors of one of the studies have admitted the possibility that the prolonged hospitalization of these offenders may have been due to administrative inertia rather than clinical judgment.\(^8\)

In the other two studies, clinical predictions clearly were the basis for treating the individuals studied as dangerous. But the results are still questionable given the strong possibility that the clinicians' definition of "dangerousness" differed from the meaning that the researchers assigned the term. The researchers in these studies looked only for evidence of actual violent acts or "assaultive behavior,"\(^9\) while the clinicians, lacking a precise definition of "dangerousness," may have interpreted the term in a much broader sense to include, for instance, a person's propensity for verbal abuse.\(^0\) Similarly, the clinicians may

---

\(^{7}\) In the Baxstrom study, see H. STEADMAN & J. COCOZZA, supra note 50, the "careers" of 967 New York State ex-prisoners were followed after the Supreme Court, in Baxstrom v. Herold, 383 U.S. 107 (1966), held invalid New York's practice of transferring prisoners whose terms had expired to maximum security facilities for the "criminally insane." As a result of Baxstrom, the ex-prisoners were either released or transferred to civil hospitals. To arrive at their conclusions about the accuracy of dangerousness predictions, the authors had to assume that the continued retention of these individuals in the maximum security hospitals (before the Baxstrom decision resulted in their release) was based on a specific determination of dangerousness, when in fact no written evidence of such a determination existed. See Allen, Book Review, 73 Mich. L. Rev. 1517, 1526 (1975). A similar criticism can be made of the Thornberry study, see T. THORNBERRY & J. JACOBY, supra note 50, which reached similar results with a different group of patients released under similar circumstances. Id. 178-79 (study conducted of 414 inmates who obtained release from the hospital for the criminally insane following a Baxstrom-like decision in Dixon v. Attorney Gen., 325 F. Supp. 966 (M.D. Pa. 1971)).

\(^{8}\) See Cocozza & Steadman, supra note 7, at 1094.

\(^{9}\) See generally Dietz, Threats or Blows?: Observations on the Distinction Between Assault and Battery, 4 INT'L J.L. & PSYCHIATRY 401 (1981) (concluding that the practice of combining attempted and completed offenses in crime classifications can obscure underlying differences).

\(^{0}\) In the New York study, see Cocozza & Steadman, supra note 7, 257 criminal defendants found incompetent to stand trial in New York City were evaluated by psychiatrists to determine their "dangerousness" under a statute defining that term as "dangerous to the safety of other patients [in the institution], the staff of the institution or the community." N.Y. CRIM. PROC. LAW § 730.10(2) (McKinney 1971) (repealed 1974). The researchers accumulated information only on the defendants who were "assaultive" during the period of the study. Id. at 1097-98. As Professor Dix has stated, "Given the likelihood that at least some clinicians interpreted [dangerousness] to mean something other than assaultiveness, it is arguably unfair to evaluate their success according to the correlation between their assessments and the subsequent violent conduct of the subjects." Dix, Clinical Evaluation of the "Dangerousness" of "Normal" Criminal Defendants, 66 Va. L. Rev. 523, 544 (1980).
have thought that they were predicting behavior in the community rather than in the institution.\textsuperscript{71} Yet for obvious reasons many of the individuals they designated as "dangerous" were institutionalized immediately and retained until some treatment had taken place, the effect of which could not be ascertained with certainty.\textsuperscript{72} Thus, in these studies, the predictor variable used by the clinicians (any dangerous behavior in the community assuming immediate release) could easily have been different from the criterion variable used by the researchers (assaultive behavior in the institution or in the community after treatment).

Finally, all seven studies of long-term dangerousness, including Kozol's, probably inflated their false positive findings by relying on public records to substantiate post-prediction behavior. Given the large samples involved and concerns over the privacy of those under study, researchers have inevitably referred to records of convictions or arrests, or to arrests and hospital reports, to determine whether an individual has engaged in antisocial behavior during the follow-up period.\textsuperscript{73} Yet much antisocial activity either goes unreported or is never solved.\textsuperscript{74} As

\begin{quote}
In the Wenk study, see Wenk & Emrich, supra note 50, the researchers combined into one group of 188 "dangerous" offenders a small group of juvenile offenders whom clinicians had labelled "high risk," and a much larger group of individuals whom the predictors regarded to be only moderate risks. Id. at 184. There is no way to tell from the study the number of false positives among the high risk group, yet arguably that figure is the more relevant one.

\textsuperscript{71} Pointing to the statute at issue in the New York City study, see Cocozza & Steadman, supra note 7, Dix notes that "it is even unclear whether the examiners were to focus upon the subject's potential for violence in the community, in the institution to which he might be committed, or both. This uncertainty is significant, given the results of the study." Dix, supra note 70, at 544 n.82.

\textsuperscript{72} For a description of the effect that treatment might have on rendering safe otherwise dangerous individuals, see Monahan, The Prediction of Violent Criminal Behavior: A Methodological Critique and Prospectus, in Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates 244 (1978).

\textsuperscript{73} The Wenk study, which obtained the highest false positive rate (92\%) of the seven studies, used convictions to assess the predictions. See Wenk & Emrich, supra note 50, at 177. The Kozol and Patuxent studies relied on arrest records alone. See Kozol, Boucher & Garofalo, supra note 50, at 392; Steadman, supra note 50, at 205. Finally, the Baxstrom, Thornberry, New York City, and Canadian studies used arrest and institutional records. See H. Steadman & J. Cocozza, supra note 50; T. Thornberry & J. Jacoby, supra note 50, at 40-53; Cocozza & Steadman, supra note 7, at 1097; Sepejak, Menzies, Webster & Jensen, supra note 50, at 173.

\textsuperscript{74} In 1979, according to United States Dep't of Justice, Sourcebook of Criminal Justice Statistics (1981), 48\% of all rapes and attempted rapes, 42\% of all robberies, and 54\% of all assaults were not reported, id. at 232; only 43.7\% of all reported violent crimes were cleared by arrest, id. at 368; and 77.9\% of those arrested for federal crimes were convicted, id. at 408. One commentator has argued that if dangerousness is validated through convictions, the resulting false positive rate should be reduced by a factor of eight. Under this formula, a false positive rate of 80\% would be
a result, some false positives are actually undetected "true positives." In Kozol's study, had there been only eight of these undiscovered true positives in the group of thirty-two who were predicted to be violent but were not rearrested, the proportion of false positive findings would have been reduced to less than fifty percent.\footnote{This improved accuracy rate, however, would probably not significantly alter the margin over chance. Because some of those who were in fact violent went undetected, the base rate for the group as a whole would be higher than the one out of nine figure cited in the text. Thus, even if Kozol and his associates did actually obtain a one out of two accuracy rate on the dangerousness issue, their predictive success would probably still come to approximately only three times better than whatever the adjusted base rate turned out to be.}

This is not meant to suggest that if and when the ideal study is conducted, it will conclude that mental health professionals can in fact predict dangerousness with a high degree of accuracy. Correcting for the problems with the research, the accuracy of clinical predictions even among populations with high base rates for violent behavior is poor, probably no better than one valid assessment out of two;\footnote{Professor Monahan, who at one time concluded that a prediction of violent behavior will at best be accurate only one out of three times, see supra note 58, now is willing to countenance this assessment. See Monahan, \textit{The Prediction of Violent Behavior: Toward a Second Generation of Theory and Policy}, 141 AM. J. PSYCHIATRY 10, 11 (1984).} for other populations, the ratio would undoubtedly be lower. On the other hand, a careful look at the research does not support the notion that the clinical prediction process cannot differentiate between dangerous and nondangerous individuals. Rather, it compels the conclusion that knowledgeable mental health professionals such as those involved in the Kozol study can arrive at opinions that are substantially better than decisions left to chance.

2. Actuarial Prediction

The few studies that have assessed the success of actuarial predictions of dangerousness obtained results similar to those investigating clinical assessments. Like the studies on clinical predictions, they relied primarily on arrest or conviction records to substantiate the commission of antisocial acts and thus may have underestimated the accuracy of the predictions.

The best known actuarial research consists of a series of studies reported by Wenk and his associates,\footnote{See Wenk, Robison & Smith, \textit{Can Violence Be Predicted?}, 18 CRIME \\ DE-} who attempted to devise and test
various violence prediction scales based on a number of actuarial factors such as the nature of the present offense, the number of prior offenses, opiate use, and length of imprisonment before release. In no instance did the false positive rate fall below eighty-six percent. In a second study, Cocozza and Steadman developed a "Legal Dangerousness Scale" composed of four items: presence of juvenile record, number of previous arrests, presence of convictions for violent crimes, and severity of the crime that resulted in the present confinement. Using this scale, they identified retrospectively one out of every three individuals under age fifty who had recidivated since their release from prison.

One of the best actuarial devices developed to date for purposes of evaluating dangerousness is used in Michigan to assist in parole decisionmaking. Relying on just six variables (focusing on adult and juvenile misconduct), the device assigns each inmate who is eligible for parole to one of five "risk" groups (very high, high, middle, low, and very low). A study applying the device to 1100 released inmates found the percentage of those in the "very high" risk group who were not rearrested to be sixty percent, in the "high" risk group almost eighty percent, and in the "middle" risk group slightly more than eighty-eight percent.

Based on the slim amount of evidence available, then, predictions using the best actuarial techniques appear to be no better or worse than...
the best clinical predictions at identifying those individuals most likely to commit violent acts. However, concluding that those individuals found to be dangerous by clinicians and "high risk" by actuarial devices are equally likely to be nondangerous should not obscure the fact that the two predictive techniques differ substantially with respect to the type of information relied upon, the way this information is combined, and the manner in which the predictive conclusion is phrased. These differences are the subject of the next section.

B. A Comparison of the Clinical and Actuarial Prediction Processes

As I will argue in parts II and III, the fundamental differences between the nature of clinical prediction and the nature of actuarial prediction have important evidentiary and constitutional consequences. Before this legal analysis can be undertaken, however, it is necessary to sketch out and compare more fully the basic characteristics of each type of prediction process.

Clinical predictions of dangerousness depend upon a multitude of facts and inferences that may vary from prediction to prediction and from clinician to clinician. Probably all mental health professionals who perform such assessments would agree that a thorough account of prior aggressive acts is absolutely necessary before a prediction can be attempted. As Kozol has stated, "Of paramount importance is a meticulous description of the actual assault. . . . Our most serious errors in diagnosis have been made when we ignored the details in the description of the assault." Beyond this basic postulate, however, it is diff-

---

83 Monahan has stated that "the actuarial method has not shown the same superiority over the clinical method in the case of violence as it has with the prediction of other behaviors," although he also predicted that actuarial devices could be greatly improved. Monahan, supra note 72, at 258.

84 Compare, e.g., Guttmacher, supra note 47, with Kozol, Boucher & Garofalo, supra note 50.

85 Kozol, The Diagnosis of Dangerousness, in VIOLENCE AND VICTIMS 3, 8 (S. Pasternack ed. 1975). See J. MONAHAN, supra note 28, at 106; A. STONE, supra note 29, at 35 ("[T]here is the clinical maxim that the best predictor of future acts is past acts."); Forst, The Psychiatric Evaluation of Dangerousness in Two Trial Court Jurisdictions, 5 BULL. AM. ACAD. PSYCHIATRY & L. 98, 104 (1977) (finding that the psychiatrists who were the subjects of the study relied principally upon an offender's record to predict future dangerousness). The work of Cocozza and Steadman suggests that many clinicians rely solely on the current alleged offense when making predictions about the dangerousness of defendants found incompetent to stand trial. "This was the single factor which showed a strong and statistically significant association with the psychiatric predictions. The more serious the alleged crime, the more likely that the psychiatrist would find the defendant dangerous." Cocozza & Steadman, supra note 7, at 1096.
cult to generalize about the process of clinical prediction.

Professor Monahan, who has written extensively on the topic, provides some illustrative examples of what clinical prediction might encompass. For instance, he suggests that one model that "may provide a vehicle for explicating many (but not all) of the factors to be assessed in violence prediction" relies on the voluminous literature concerning how people cope with stress. The clinician adhering to this model would want to find out how the individual cognitively appraises stressful occurrences, what her typical expectations are in such situations, the type and intensity of any affective reactions to stress, and the manner in which the individual typically chooses to cope with stressful events. The term "appraisal" refers to the extent to which an individual interprets events as provocative or as accidental (for example, "You didn't just bump into me, you meant to hit me!"). Expectations deal with how one perceives oneself acting during a given stressful event (for example, "Anybody who insults my wife gets hit!"). Affective reactions refer to the extent to which the individual is predisposed to anger and hatred or to violence-inhibiting emotions such as guilt, empathy, anxiety, and fear. Finally, behavioral responses to stress can range from violence to withdrawal and avoidance. All of these factors are interrelated. They provide a road map of sorts for conducting an inquiry into past behavior.


J. MONAHAN, supra note 28, at 109-12.

One psychological factor that does not clearly correlate with violence is mental illness. Although the linkage between mental disorder and dangerousness is assumed to exist by the public, research indicates that prisoners do not appear to have higher rates of severe mental illness than demographically comparable groups in the community. See id. at 77-79. Moreover, mentally ill patients do not appear to be any more violent than the non-mentally ill who have comparable histories of violent behavior. See id. at 79-82.

Nonetheless, as Monahan and Steadman have pointed out, mental disorder cannot be discounted altogether as a factor in long-term dangerousness predictions. The research can be read to support the proposition that mental disorder simply coexists with criminality. But a more likely interpretation is that in a small number of cases mental disorder predisposes one toward criminality and in a roughly equal number of cases it inhibits criminality, and that these two groups of cases "cancel each other out when aggregated into group rates." Monahan & Steadman, Crime and Mental Disorder: An Epidemiological Approach, 4 CRIME & JUST. 145, 182-83 (1983). With respect to the stress model, some types of delusions may cause an individual to misperceive an innocent act as a threat or to be particularly sensitive to slights, while other types of mental disorder may cause the opposite reaction.

Although more significant in the civil commitment setting than in the contexts at issue here, one study found the presence of hallucinations to be the strongest factor predisposing one toward violent behavior in the emergency hospitalization context. See Werner, Rose, Yesavage & Seeman, Psychiatrists' Judgments of Dangerousness in Pa-
A different clinical perspective is provided by Kozol and his associates, who hypothesize that the dangerous person is

one who has actually inflicted or attempted to inflict serious physical injury on another person; harbors anger, hostility, and resentment; enjoys witnessing or inflicting suffering; lacks altruistic and compassionate concern for others; sees himself as a victim rather than as an aggressor; resents or rejects authority; is primarily concerned with his own satisfaction and with the relief of his own discomfort; is intolerant of frustration or delay of satisfaction; lacks control of his own impulses; has immature attitudes toward social responsibility; lacks insight into his own psychological structure; and distorts his perception of reality in accordance with his own wishes and needs.89

Although this brief summary far from exhausts the type of information and inferences that a professional attempting a clinical prediction might consider relevant, it depicts the flavor of the clinical process and is therefore sufficient for present purposes.

An actuarial prediction is typically based on a much narrower array of factors. As defined earlier, it relies solely on information that has a definitive statistical correlation to what is being predicted.90 Although research may at some point in the future demonstrate a statistical link between violence-proneness and clinical or psychological variables (such as diagnosis or impulsivity), no precise data on the subject yet exist. Rather, recent studies have been able to relate only a finite number of demographic variables to violent behavior, most prominently among them prior antisocial conduct (with the likelihood of recidivism increasing with each arrest), age (with those under fourteen and over forty much less likely to commit violent acts than those in between), sex (nine out of ten arrests for violent crimes are of males), and race (with blacks being arrested for forty-six percent of all violent crime despite the fact that they comprise less than fifteen percent of the population).91 Other factors that have been found to correlate with violent be-

---

89 Kozol, Boucher & Garofalo, supra note 50, at 379.
90 See P. MEEHL, supra note 48.
91 See J. MONAHAN, supra note 28, at 71-75, for a summary of the relevant research. See also M. WOLFGANG, R. FIGLIO & T. SELLIN, DELINQUENCY IN A BIRTH COHORT (1972) (describing results of longitudinal study of approximately 10,000 males born in 1945); Shah, supra note 15, at 233 (summarizing studies of recidivism). Reliance on race, sex, and similar demographic variables, however, raises some difficult issues. See infra note 188.
behavior, although to a lesser extent, are IQ, socioeconomic and employment status, opiate and alcohol abuse, and marital status.\footnote{See J. Monahan, supra note 28, at 75-77.} An actuarial prediction for a particular individual would entail determining her characteristics in categories like these and then finding out how many in a statistically significant sample of individuals with similar characteristics acted violently within a given period of time. The percentage obtained would represent the probability that the individual in question would also act out violently within that time period.

As should be apparent even from this summary, actuarial predictions have several advantages over clinical predictions. First, the personal characteristics that have to date been found relevant to actuarial prediction will usually be easier to ascertain than those relevant to clinical prediction. Finding out an individual’s age or sex, or arrest or marital status, involves considerably less guesswork than determining how she appraises certain situations, reacts emotionally to them, or copes with them behaviorally. Of course, to the extent an actuarial prediction departs from reliance on the types of demographic and “public record” variables listed above and depends instead on soft variables such as “degree of stress-tolerance” or diagnosis, it loses this advantage.\footnote{Some demographic facts may also be subject to manipulation. For instance, one reason given for removing “release plan to live with spouse and/or children” from the United States Parole Commission’s Salient Factor Score was that the prisoner could contrive living arrangements in order to obtain a favorable rating on that point. See Coffee, The Repressed Issues of Sentencing: Accountability, Predictability, and Equality in the Era of the Sentencing Commission, 66 Geo. L.J. 975, 1027 n.159 (1978). Employment status could be manipulated as well. To the extent that the actuarial prediction process cannot take account of such a possibility, it may be necessary to remove this factor as a predictor item or count it as a soft variable.}

This distinction between hard-variable and soft-variable actuarial prediction is an important one, to be re-emphasized throughout this Article.

Second, whether reliance is placed on hard or soft variables, the manner in which an actuarial prediction combines these variables is more explicit and reliable (that is, capable of being replicated) than the way in which clinical opinions are formed. This is because an actuarial device lists the factors the predictor must consider and the exact weight to be assigned to each \textit{before} the prediction is made.\footnote{Unlike the actuarial predictor, “[a] clinical decisionmaker is not committed in advance of decision to the factors that will be considered and the rule for combining them.” Underwood, Law and the Crystal Ball: Predicting Behavior with Statistical Inference and Individualized Judgment, 88 Yale L.J. 1408, 1423 (1979).} A clinical prediction, on the other hand, “must ultimately be based upon an overall subjective impression which is based upon an understanding of the in-
terrelatedness of many factors.” Since “subjective impressions” may differ from clinician to clinician, and even from case to case for the same clinician, each clinical prediction will probably be based on a different constellation of factors.

Finally, the probability of violent behavior obtained from an actuarial table will be more precise than that reached through the clinical process. Even assuming that accurate data exist, the extent to which a clinical evaluation does or does not indicate dangerousness cannot be calculated with the same degree of precision that an actuarial device provides. Kozol and his associates designated only those who were “dangerous” and “not dangerous.” If pushed, they might have been able to indicate who in the former group was a “very high risk” and who was only a “high risk.” But the Michigan actuarial device easily differentiates between the two groups and definitively states that a person in the “high risk” group has a twenty percent chance of being rearrested within a year of release while a person in the “very high risk” group has a forty percent chance.

An actuarial prediction does have its drawbacks, however. Problems associated with its admissibility in court will be discussed in part II; here only its methodological disadvantages will be noted. One major disadvantage is that helpful actuarial information is not presently available for many of the populations that are most likely to be evaluated. Crime statistics for the population at large exist, but the fact that a young white male has one chance in one hundred of committing a violent crime within the year is virtually useless information. Unfortunately, obtaining more specific data can be difficult. For instance, because those subjected to criminal commitment on “dangerous to others” grounds are usually institutionalized and medicated rather than released, data on their dangerousness in the community simply cannot be obtained. A purely clinical prediction, of course, does not rely upon such group data. An actuarial prediction depends upon such data.

Moreover, how does one verify that violent behavior has in fact occurred without continuous monitoring of the individuals being studied? For reasons already suggested, conviction and arrest records do not accurately reflect the true crime rate. At the same time, an arrest for rape does not necessarily mean that a rape was committed.

---

96 See J. Monahan, supra note 28, at 70.
97 See, e.g., United States Dep’t of Justice, supra note 74, § 4; United States Dep’t of Justice, Uniform Crime Reports § IV (1982).
98 See supra note 72 and accompanying text.
99 On the average, in United States district courts, 20.1% of those arrested have the case against them dismissed or are acquitted. United States Dep’t of Justice,
These methodological problems are not wholly insurmountable. A study monitoring the behavior of individuals who are involuntarily hospitalized but purposefully left unmedicated, or who are released into the community despite a prediction of dangerousness, would produce data highly relevant to the type of dangerousness assessment required for criminal commitment. Follow-up of offenders while they are in prison and once they are released has already provided some initial actuarial data that may be useful at sentencing. Verification techniques will never be perfect, but their limitations can be taken into account in analyzing the data. To date, the impetus for collecting actuarial information has been minimal because clinical predictions are available and so widely used. If the demand for actuarial predictions increased, better data would probably be forthcoming. On the other hand, it must be recognized that actuarial data sufficiently discriminating to designate groups that are highly violence-prone (that is, those with a fifty to eighty percent chance of recidivism) may never exist for many types of populations, even if soft factors are included as prediction variables.

An even more telling criticism associated with actuarial prediction is that it cannot help neglecting pertinent characteristics of the individual evaluated. An actuarial prediction may give us the most explicit

supra note 74, at 408. There is also the problem of "processing bias," whereby certain groups—e.g., blacks—are inappropriately arrested more often than are other groups. See McNeely & Pope, Race and Involvement in Common Law Personal Crime: A Response to Hindelang, 8 REV. BLACK POL. ECON. 405, 405-06 (1978).

100 See Monahan, Strategies for an Empirical Analysis of the Prediction of Violence in Emergency Civil Commitment, 1 LAW & HUM. BEHAV. 363, 368 (1977). Dix has proposed that a "true experiment" be undertaken matching groups of individuals with identical characteristics, one of which is subjected to involuntary confinement, the other of which "must simply be left to [its] own devices." Dix, "Civil" Commitment of the Mentally Ill and the Need for Data on the Prediction of Dangerousness, 19 AM. BEHAVIORAL SCIENTIST 318, 332 (1976). Although participating in such a study would probably be unethical from the mental health professional's point of view, Dix argues that "ethical considerations demand that we learn more about the accuracy and effectiveness of these systems if such systems are to be continued." Id. at 333.

101 The Michigan study described earlier, see supra notes 81-82 and accompanying text, is a good example. See also Cocoza & Steadman, supra note 79, at 1012 (eight-year follow-up of New York parolees); McGee, Objectivity in Predicting Criminal Behavior, 42 F.R.D. 192, 194-96 (1967) (describing a California point system developed to measure the results of correctional treatment for youthful offenders).

102 For instance, if one out of every five arrests is unfounded, see supra note 99, then actuarial research using arrest rates as the criterion variable can be discounted proportionately.

103 Professor Monahan, despite earlier optimism, now believes that meaningful actuarial data relevant to civil commitment proceedings may never exist. Telephone interview with John Monahan (Feb. 10, 1984); see also Morse, supra note 7, at 620 (noting that the accuracy of actuarial data is not likely to be very high or very precise).

104 See generally P. MEHRL, What Can the Clinician Do Well?, in PSYCHODIAGNOSIS: SELECTED PAPERS 165, 169-70 (1973) (discussing factors favoring clinical prediction); Tribe, Trial by Mathematics: Precision and Ritual in the Legal
information we can obtain about first-offender drug addicts, but it tells us nothing about other traits a particular first-offender drug addict has that might increase or decrease her potential for dangerous behavior. It is in discovering these idiosyncratic characteristics that the clinical process provides information, however imprecise, that an actuarial prediction cannot.\textsuperscript{105}

A third, related criticism leveled against actuarial prediction is less well founded, although it too focuses on the impersonal nature of the actuarial prediction. It has often been pointed out that what may be true for other persons in the past does not necessarily mean anything about a person in the present, regardless of any similarity in characteristics, since every individual acts according to her own patterns of behavior.\textsuperscript{106} Yet the fact remains that actuarial prediction is at least as accurate as clinical prediction at determining who is most likely to be violent. Moreover, statistical inference is individualized, or case-specific, in the sense that it predicts the chances that a certain individual, because of particular traits she possesses, will act out violently in the future. Admittedly, the primary reason that these particular traits are relied upon is that they are statistically related to the behavior of other people at some time in the past, rather than to the behavior of this person in the future. But with most if not all statistical factors, there is also a reasonable theoretical justification for relying on them as predictors—it makes sense that a person who has committed one offense and used drugs is more likely to commit another crime than a teetotaler who has no criminal record.\textsuperscript{107}

\textit{Process}, 84 Harv. L. Rev. 1329, 1393 (1971) (there are inherent limitations in linking mathematics to rulemaking because readily quantifiable variables dwarf those that are harder to measure).

\textsuperscript{105} See Underwood, supra note 94, at 1427.

\textsuperscript{106} "A fatal non sequitur occurs in the reasoning that if 80% of the delinquents who come from broken homes are recidivists, then \textit{this} delinquent from a broken home has an 80% chance of becoming a recidivist. The truth of the matter is that \textit{this} delinquent has either 100% certainty of becoming a repeater or 100% certainty of going straight." P. Meehl, supra note 48, at 19 (quoting Allport, \textit{The Use of Personal Documents in Psychological Science}, 49 S.S.R.C. Bull. 156 (1942)). See also Tribe, supra note 104, at 1344 ("[C]oncepts of probability based upon the relative frequency of various events must be applied, if at all, not to the statistical prediction of a possible future event but to a determination of the occurrence or characteristics of an alleged past event.").

\textsuperscript{107} As Monahan puts it:

What is necessary to make the inferential leap from membership in a class that has in the past been violent to the prediction that this member of the same class will in the future be violent is a \textit{theory} linking the conditions operating to produce violence in the past class of cases with the conditions operating to produce violence in this specific present case.

J. Monahan, supra note 28, at 66.
The main reason this criticism of the actuarial method cannot be given much weight, however, is that it would apply to clinical predictions as well. While clinicians look at individual patterns, they do not do so in a vacuum. Rather they make comparisons—sometimes implicit, sometimes explicit—between these patterns and the patterns of other individuals or groups of individuals that they know about through experience, training, or education. In this regard, most clinical predictions differ from actuarial ones only in the sense that the link between past groups and present individuals is not statistically correlated.

C. Summary

Current depictions of the research on dangerousness predictions exaggerate their inaccuracy. Nonetheless, read in their best light the data suggest that neither the clinical nor the actuarial method of prediction provides information that will permit an accurate designation of a "high risk" group whose members have more than a forty to fifty percent chance of committing serious assaultive behavior. Given the low base rate for violent behavior, this figure is substantially higher than it would be for decisions made randomly, but it still produces a significant number of false positives. Moreover, the number of professionals who can produce clinical predictions significantly better than chance appears to be limited.

The typical hard-variable actuarial prediction, on the few occasions when available data allow it to be made, is much more accurate than a clinical prediction at indicating the precise probability of violent behavior because it relies on relatively easily ascertained data that are quantifiably correlated with such behavior. A corollary of this fact is that at the time the prediction is made, disagreement over a prediction's accuracy is likely to be greater with a clinical opinion than with an actuarial one. The clinical literature does suggest, however, that certain types of data, such as information about prior antisocial acts and a per-

108 The clinical literature described earlier, see supra text accompanying notes 84-89, is based on observations of individuals who have acted out aggressively. This kind of information will often guide clinicians making dangerousness assessments. Their predictions will therefore be based at least in part on how other persons have behaved in the past. Even the clinician who is unaware of this information or of any other literature describing traits of those who have acted out violently is bound to be influenced by past experiences with other individuals, whether in or out of professional practice. A prediction based solely on the past behavior of the individual being evaluated with no reference points is rare and perhaps impossible. Cf. Underwood, supra note 94, at 1427 ("Although the clinician need not identify in advance the characteristics he will regard as salient, he must nevertheless evaluate the applicant on the basis of a finite number of salient characteristics, and thus, like the statistical decisionmaker, he treats the applicant as a member of a class defined by those characteristics.").
son's reaction to stress, as well as inferences from those data, can be useful in making predictions about violence-proneness. The remainder of this Article discusses the implications of these conclusions for the admissibility of dangerousness testimony.

II. AN EVIDENTIARY ANALYSIS OF DANGEROUSNESS PREDICTIONS

Critics of prediction testimony by mental health professionals have focused on three evidentiary doctrines in proposing its exclusion: the expert opinion rule, the relevance doctrine, and the so-called general acceptance or Frye test for the admissibility of scientific evidence.

Expert opinion evidence is admissible when it provides information "beyond the ken" of the layperson\(^{109}\) or, to use the liberalized language of the Federal Rules of Evidence, when it is based on "scientific, technical or other specialized knowledge" that "will assist the trier of fact to understand the evidence or to determine a fact in issue."\(^{110}\) It has been contended that mental health professionals are not experts on dangerousness because their testimony does not meet this standard. This lack of expertise argument can take two different tacks. The first states simply that evidence that is as inaccurate as dangerousness testimony cannot be helpful to a judge or jury.\(^{111}\) The second assumes a minimum degree of validity but concludes that laypersons are as competent as mental health professionals at predicting dangerousness and therefore do not need professional assistance in deciding the issue.\(^{112}\)

Alternatively, it has been contended that under the traditional relevance approach\(^{113}\) the probative value of dangerousness testimony (which is admittedly low) is outweighed by the substantial harm it could have on the defendant's case.\(^{114}\) This harm could be caused either by the factfinder's undue reliance on the expert's testimony, or by an


\(^{110}\) Fed. R. Evid. 702.

\(^{111}\) See Dix, supra note 7, at 21 ("Increasingly it is agreed that [clinical dangerousness] testimony, which is of dubious accuracy and questioned by the mental health professional community, is unlikely to aid the trier of fact to a significant degree."); see also Ennis & Litwack, supra note 7, at 737 ("Whatever may be said for the reliability and validity of psychiatric judgments in general, there is literally no evidence that psychiatrists reliably and accurately can predict dangerous behavior.").

\(^{112}\) See A. Stone, supra note 29, at 33; Morse, supra note 7, at 620.

\(^{113}\) See generally C. McCormick, supra note 109, §§ 184-211, at 433-523; Trautman, Logical or Legal Relevancy—A Conflict in Theory, 5 Vand. L. Rev. 385 (1952); infra text accompanying notes 131-35.

\(^{114}\) See Morse, supra note 7, at 622; Note, People v. Murtishaw: Applying the Frye Test to Psychiatric Predictions of Dangerousness in Capital Cases, 70 Calif. L. Rev. 1069, 1079-81 (1982).
inability of the factfinder to grasp the nuances of the problems associated with predictions of dangerousness, or by both.

Finally, dangerousness testimony might be excluded under the \textit{Frye} rule. Formulated by the United States Court of Appeals for the District of Columbia Circuit in \textit{Frye v. United States},\footnote{115 293 F. 1013 (D.C. Cir. 1923).} this rule requires that a scientific principle, discovery, or technique be "sufficiently established to have gained general acceptance in the particular field in which it belongs" before testimony based on it can be heard in evidence.\footnote{116 \textit{Id.} at 1014.} If the clinical or actuarial prediction process is not accepted by the relevant professional community, testimony derived from it would be inadmissible under the \textit{Frye} rule.

I do not believe that any of these evidentiary doctrines requires complete exclusion of dangerousness testimony offered by competent clinicians. Such testimony will be relevant in any case in which dangerousness is at issue, and in such cases the testimony can be helpful to the trier of fact. Whether the prediction is based on scientific principles or techniques generally accepted by a particular scientific community should not be a criterion of admissibility. On the other hand, the expert opinion rule does impose restrictions on who testifies and on the scope of her testimony. Moreover, under traditional relevance analysis the prejudicial impact of clinical, as opposed to actuarial, prediction testimony requires limiting its use by the prosecution to rebuttal of clinical testimony introduced by the defense. The next three sections develop these thoughts.

\textbf{A. Are There "Experts" on Dangerousness?}

The Federal Rules of Evidence, which I shall rely upon as the most representative expression of modern evidentiary doctrine, establish a rather complex analytical framework for determining whether a witness may offer an opinion as an expert. Under the rules, the witness (1) must possess scientific, technical, or other specialized knowledge\footnote{117 \textit{FED. R. EVID.} 702 reads in full: "If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise." Use of the word "specialized" is meant to indicate that "skilled" individuals who may not belong to a scientific discipline may still be considered experts. \textit{See FED. R. EVID.} 702 advisory committee note. This broad definition is significant to the extent that the clinical prediction of dangerousness is not considered "scientific."} that is (2) relevant to a fact at issue\footnote{118 \textit{See FED. R. EVID.} 401.} and that is (3) based on informa-
tion "reasonably relied upon" by other experts in the field. Only if these requirements are met does one need to determine whether (4) the testimony can "assist the trier of fact." Each of these predicates to expertise will be treated separately.

1. The "Specialized Knowledge" Requirement

As part I demonstrated, theories purporting to explain and identify the dangerous person do exist. There are mental health professionals who, because of their understanding of these theories and their skill at applying them, have some ability to predict future behavior. Which mental health professionals possess this specialized knowledge and what this knowledge permits them to say in court are the questions that need to be answered.

As part I suggested, clinicians who have spent considerable time contemplating dangerousness, developing systematic evaluation procedures, and working with violent people are rare. The typical mental health professional is concerned with diagnosing and treating mental disorder, skills that are of limited utility in evaluating dangerousness. As Professor Dix has argued, a clinician unfamiliar with the research literature on dangerousness prediction should not be considered qualified to offer a clinical prediction of dangerousness, regardless of her educational or experiential attainments. Nor should expert status be granted the professional who lacks experience evaluating the particular population of individuals from which the subject comes. A court should also inquire into the adequacy of the professional's evaluation procedures, a topic discussed in more detail below. If courts adopt these requirements, few mental health professionals will be found to have the specialized knowledge and skills necessary to render admissible clinical prediction testimony.

To the extent actuarial data are relied upon, the witness must also be familiar with statistical methodology. If a prediction is purely actuarial, then access to this specialized knowledge becomes paramount; in fact, a clinical degree may be unnecessary.

---

119 Fed. R. Evid. 703.
120 Fed. R. Evid. 702.
121 See supra text accompanying notes 84-89.
122 See supra note 88.
124 See infra text accompanying notes 131-32.
125 See Morse, supra note 7, at 623-24 ("[A]ny expert with hard probability data, including those from nonmental health disciplines such as sociology, should be allowed to testify about such data.")
Unfortunately, where clinical predictions are concerned, even those individuals who have acquired some specialized knowledge about dangerousness often provide testimony exceeding the boundaries of their knowledge. In particular, clinical predictions that an individual is dangerous or "likely to be violent," although presently the mainstay of commitment and sentencing proceedings, go beyond the limited scope of current expertise. There simply are no clinical theories that permit such bald assertions. The most that the literature suggests is that certain factors (such as one's appraisals and expectations) enhance or diminish the likelihood of violent behavior. The clinician should be limited to a description of these factors and their applicability to the subject rather than be allowed to guess at probabilities that only a methodologically sound actuarial table can provide. The American Bar Association has advocated the same sort of limitation on expert dangerousness testimony, on the ground that a predictive conclusion "is not viewed as being within the specialized knowledge of the expert." The Federal Rules of Evidence do permit an expert to address the "ultimate issue" to be decided by the trier of fact, but such testimony is admissible only when based on scientific, technical, or specialized knowledge possessed by the expert. Otherwise the specialized knowledge requirement is meaningless. Thus, unless actuarial data are available, decisions about the likelihood of violence must be left entirely to the trier of the fact. Again, the clinician should be confined to offering evidence identifying and categorizing as violence-inducing or violence-inhibiting whatever characteristics her insights indicate are relevant.

---

126 The Court of Appeals for the District of Columbia Circuit has recognized the importance of circumscribing the testimony of the clinician:

Psychiatrists should not be asked to testify, without more, simply whether future behavior or threatened harm is "likely" to occur. For the psychiatrist "may—in his own mind—be defining 'likely' to mean anything from virtual certainty to slightly above chance. And his definition will not be a reflection of any expertise, but . . . of his own personal preference for safety or liberty."

Cross v. Harris, 418 F.2d 1095, 1100-01 (D.C. Cir. 1969) (quoting Address by Alan M. Dershowitz, Psychiatry in the Legal Process: "A Knife that Cuts Both Ways," Harvard Law School Sesquicentennial Celebration (Sept. 22, 1967)); see also Morse, supra note 7, at 621 ("[E]xperts should testify with all the quantitative precision they possess and should leave the interpretation of legal terms such as 'likely' or 'improve' to the legal decisionmaker.").

125 MENTAL HEALTH STANDARDS, supra note 13, § 7-3.9(b) commentary.

128 FED. R. EVID. 704 ("Testimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact."). Rule 704 abolished the judicially created "ultimate issue" rule, under which such testimony had been kept from the trier of fact, to insure that opinions be admitted when helpful. Id. advisory committee note.
2. Relevance

Assuming appropriately framed testimony from a qualified professional, a threshold issue for determining its admissibility as expert opinion under rules of evidence is whether it is relevant to the dispute at hand. If what the professional has to say does not meet this requirement, it cannot be helpful to the factfinder.

Under the Federal Rules of Evidence, evidence is relevant if it has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." Accordingly, evidence must be both material to a fact or facts properly raised and possess some "probative value"—that is, alter the probability that a material proposition is true or false.

In any proceeding in which dangerousness is an issue, appropriately limited clinical or actuarial testimony suggesting that a person will or will not act violently in the future is clearly material. Admittedly, many of the psychological and environmental factors relied upon by clinicians have not been demonstrated to be statistically related to violence-proneness. But neither have they been demonstrated to be unrelated. Under these circumstances, the law has to rely on a commonsense assessment of materiality. When prediction testimony is offered, the assessment should usually be positive: the extent to which a person reacts aggressively to affronts to his masculinity, enjoys witnessing suffering, or experiences innocent acts as threats seems logically associated with violence-proneness.

Prediction testimony should also satisfy the minimal level of probativeness required by the relevance test. Clinical testimony tending to show that someone is dangerous is, on the average, more accurate than a decision left to chance—at least when it is made by a qualified clinician versed in the literature and experienced in making such predictions. It thus rises above mere conjecture or speculation, which is all that the relevance test requires. A more demanding threshold for
relevance purposes would exclude from the factfinder's consideration material information that might enhance its ability to make a decision that is better than a mere guess.

3. The "Reasonable Reliance Test"

The Federal Rules of Evidence scrutinize not only the expert's opinion but also the bases for that opinion. To be admissible under Rule 703, expert testimony must be based on facts or data "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject."¹³⁴ The rule makes it clear that data need not be admissible under other rules of evidence to be "reasonably relied upon." Because of an assumption that qualified experts will take care to consult only trustworthy sources, expert opinion based on otherwise inadmissible hearsay is generally admissible.¹³⁵ On the other hand, a particular type of data will not be a proper basis for expert testimony simply because experts in the field rely upon it; such reliance must be shown to be reasonable. Although Rule 703 has not been consistently interpreted by the courts,¹³⁶ at bottom it seems to re-

¹³⁴ FED. R. EVID. 703.
¹³⁵ See FED. R. EVID. 703 advisory committee note.
¹³⁶ Where psychiatric testimony is involved, most courts merely note that the information forming the basis for the opinion is of the type other mental health professionals rely upon; no further investigation of the data's reliability is made. In the leading case of Jenkins v. United States, 307 F.2d 637, 641-42 (D.C. Cir. 1962), the court held that a psychiatrist's testimony was admissible, although it was based largely upon the medical reports and tests of others. See also United States v. Madrid, 673 F.2d 1114, 1121-22 (10th Cir.) (evidence of prior robberies to support heroin addiction used as partial basis for psychiatrist's opinion), cert. denied, 459 U.S. 843 (1982); United States v. Lawson, 653 F.2d 299, 301-02 (7th Cir. 1981) (staff reports and other military information, and interviews with other physicians used as basis), cert. denied, 454 U.S. 1150 (1982); Kibert v. Peyton, 383 F.2d 566, 570 (4th Cir. 1967) (observations of laypersons); Brown v. United States, 375 F.2d 310, 318 (D.C. Cir. 1966) (observations of medical staff members), cert. denied, 388 U.S. 915 (1967); United States v. Phillips, 515 F. Supp. 758, 762-63 (E.D. Ky. 1981) (hospital records, consulting psychiatrist's report, team diagnosis by medical staff). With other types of expert evidence, however,
quire that the information underlying an expert opinion not only be of the type relied on by other experts in the field but that it be both material and probative to the opinion. In other words, the relevance test must be met not only for the opinion itself, but for the facts supporting it.

The materiality analysis is straightforward. Data underlying an actuarial prediction, whether hard or soft, are by definition empirically correlated to violence-proneness. And if one abides by the limitations on prediction testimony advanced earlier, the materiality of the facts supporting a clinical opinion will be virtually identical to the materiality of the opinion itself, because the opinion will in essence consist of factual observations commonsensically related to dangerousness (such as whether one is stressed in a given situation or enjoys the suffering of others).

Similarly, the probative value of clinical observation (which would include gauging the presence of soft actuarial variables) does not pose a problem for dangerousness testimony. Admittedly, compared to demo-

courts often look to its reliability, as well as the extent to which it will assist the factfinder and avoid prejudicing one of the parties, all under the rubric of Fed. R. Evid. 703. See, e.g., Guardians Ass'n v. Civil Serv. Comm'n, 633 F.2d 232, 240 (2d Cir. 1980) (expert's determination of test passing rates for whites, blacks, and hispanics is subject to critical statistical analysis), aff'd, 103 S. Ct. 3221, cert. denied, 103 S. Ct. 3568 (1983); United States v. Morrison, 531 F.2d 1089, 1094-95 (1st Cir.) (investigating basis for "gambling" expert's opinion), cert. denied, 429 U.S. 837 (1976); Zenith Radio Corp. v. Matsushita Elec. Indus. Co., 505 F. Supp. 1313 (E.D. Pa. 1980), aff'd in part and rev'd in part sub nom. In re Japanese Elec. Prods. Antitrust Litig., 723 F.2d 238, 277 (3d Cir. 1983) (reaffirming principle that assumptions forming the basis for an expert's opinion are subject to "rigorous examination"; however, antitrust expert permitted to base "professional opinion" on whatever information she deems reliable).

At least one commentator has suggested that the reasonable reliance test should be construed to require that scientific data and the procedures used to obtain them be generally accepted as reliable by the relevant elements of the scientific community. See Note, Expert Testimony Based on Novel Scientific Techniques: Admissibility Under the Federal Rules of Evidence, 48 GEO. WASH. L. REV. 774, 788 (1980). In effect, this approach would have the Federal Rules of Evidence incorporate the Frye rule, which, I will argue, is too rigid in its approach to scientific evidence. See infra text accompanying notes 150-66. Rule 703, like the Federal Rules of Evidence generally, should be interpreted so as to admit relevant evidence unless some countervailing factor outweighs its probative value. See Fed. R. Evid. 403 advisory committee note.

On the other hand, it may be that some of the data forming the basis for a clinical prediction are hearsay without falling under one of the established hearsay exceptions. In this situation, it may be necessary for the court to take special care in determining whether an opinion based on this information should be admissible, given the inability to cross-examine the declarant. See Note, Hearsay Bases of Psychiatric Opinion Testimony: A Critique of Federal Rule of Evidence 703, 51 S. CAL. L. REV. 129, 154-56 (1977) (arguing that hearsay information relied upon by psychiatric experts should meet two tests: (1) the information should be of the type used by other psychiatrists; and (2) it should be trustworthy as determined by an investigation into the sources of the hearsay and the procedures used for collecting it).
graphic facts such as age, sex, or number of prior arrests, degrees of stress or intensity of anger are difficult to verify. Studies indicating that clinicians in general practice often disagree on assessments of this nature suggest a high rate of inaccuracy as well. Clinicians who claim specialized knowledge about dangerousness are undoubtedly just as susceptible to these pitfalls. Once again, however, it must be remembered that their observations, however imprecise, are accurate enough to allow better than random choices. In most cases in which knowledgeable professionals are involved, one would have to conclude that the reasonable reliance test is satisfied.

I say in most cases because there may be situations in which otherwise qualified professionals use highly questionable procedures to obtain the clinical data, thus rendering the data and the opinion relying upon the data more suspect than usual. For instance, if the facts upon which a clinical opinion is based were obtained during a half-hour interview with no reference to third-party sources or were taken entirely from a hypothetical question, they probably could not be deemed "reasonably" relied upon. Such procedures do not, on their face and according to most mental health professionals, appear to afford adequate protection against inaccuracy. Before a court permits a clinician to

---

138 A review of the literature indicates that, on the average, professionals reach identical diagnoses for a given individual 50% to 93% of the time, depending upon the diagnostic category. A summary of research appears in Ennis & Litwack, supra note 7, at 699-708; see also Spitzer, Endicott & Robins, Clinical Criteria for Psychiatric Diagnosis and DSM-III, 132 AM. J. PSYCHIATRY 1187, 1190-91 (1975) (description of more recent research using more precise diagnostic criteria). Differences in diagnoses are due in part to a lack of consistent diagnostic criteria. See id. at 1191. But differences also result in part from difficulties in reaching agreement on the presence or absence of the symptoms—similar to the characteristics discussed in the text—comprising the diagnosis. See Ward, Beck, Mendelson, Mock & Erbaugh, The Psychiatric Nomenclature, 7 ARCHIVES GEN. PSYCHIATRY 198, 199-201 (1962). Studies attempting to measure directly the reliability of symptomatology assessments support this inference. See, e.g., Katz, Cole & Lowery, Studies of the Diagnostic Process: The Influence of Symptom Perception, Past Experience, and Ethnic Background on Diagnostic Decisions, 125 AM. J. PSYCHIATRY 937, 945-46 (1969) (disagreements among clinicians due largely to actual differences in perception of symptoms); Rosenzweig, Vandenberg, Moore & Dukay, A Study of the Reliability of the Mental Status Examination, 117 AM. J. PSYCHIATRY 1102, 1104-05, 1108 (1961) (reliability of diagnosis greatly affected by rating technique used).

139 A behavioral science rule of thumb is that the "validity" or accuracy of a judgment is limited by its "reliability" or ability to be replicated. See generally Beck, Reliability of Psychiatric Diagnoses: I. A Critique of Systematic Studies, 119 AM. J. PSYCHIATRY 210, 211-13 (1962).

140 In Barefoot v. Estelle, 103 S. Ct. 3383 (1983), Dr. Grigson testified that there was a "one hundred percent" chance that Barefoot would be a continuing threat to society. Id. at 3407 (Blackmun, J., dissenting). He based his opinion on a hypothetical question that described (1) Barefoot's four prior nonviolent offenses; (2) his arrest on charges of statutory rape and unlawful restraint of a minor child; (3) his escape from prison after the arrest on the rape charge; and (4) the events surrounding the capital
testify on the dangerousness issue it should establish that she has followed procedures that attempt to insure a high degree of reliability.\textsuperscript{141} This examination of evaluation procedure, which is related to the issue of which professionals are qualified to testify, is especially important when the accuracy of the opinion and the data upon which it is based are questionable, as is the case with dangerousness testimony.

4. Assisting the Trier of Fact

Assuming that the witness is qualified and that the opinion is both based on appropriate data and data-collection procedures and confined to the witness's specialized knowledge, the party proffering the witness still must show that the testimony will add to what the factfinder can discover for itself. As Professor Ladd has put it:

There is no more certain test for determining when experts may be used than the common sense inquiry whether the untrained layman would be qualified to determine intelli-

murder. Although this information would be relevant to both actuarial and clinical predictions about dangerousness, for a clinician to arrive at an absolute conclusion on the issue when she has not interviewed the individual in question, possesses only sketchy information about the individual's past acts, and apparently makes no attempt at actuarial analysis stretches the bounds of professional behavior. As another psychiatrist testified at Barefoot's habeas proceeding, if a doctor over whom he had supervisory authority claimed to be 100% sure of something without examining the patient, "we would kick him off the staff of the hospital for his arrogance." \textit{Id.} at 3400 n.11. Dr. Diamond and Professor Louisell have stated that hypothetical testimony is "of doubtful worth and often of dubious ethical quality." Diamond & Louisell, \textit{The Psychiatrist as an Expert Witness: Some Ruminations and Speculations}, 63 \textit{Mich. L. Rev.} 1335, 1347 (1965).

In another case, Dr. Grigson conducted a 90-minute interview on the basis of which he purported to be able to deliver opinions about the subject's competency to stand trial, mental state at the time of the offense, and dangerousness. See \textit{Estelle v. Smith}, 451 U.S. 454, 457, 459-60 (1981). Perhaps an adequate evaluation of all three of these issues in this period of time is not impossible under all circumstances. If one were to follow the types of procedures advocated by Kozol and his associates or by Monahan, however, an evaluation of the dangerousness of an individual would on the average take much longer. See Kozol, Boucher & Garofalo, \textit{supra} note 50, at 383-86 (diagnosis should include clinical examinations, psychological tests, creating a life history, and meticulous description of the actual assault); Monahan, \textit{supra} note 28, at 101-23 (clinician must investigate personal history, demographic characteristics, person's environment, and reactions to stress).

Of course, it is likely that Dr. Grigson would not meet the other qualification requirements discussed earlier. See \textit{supra} text accompanying notes 121-26. At the Barefoot sentencing proceedings, he testified that he was unfamiliar with many of the studies on dangerousness and asserted that only a "small minority group" of psychiatrists accepted their findings. \textit{Barefoot}, 103 S. Ct. at 3408.

\textsuperscript{141} Ideally, the mental health professions themselves would develop guidelines for minimally adequate evaluation procedures that could aid the courts in this task. See \textit{generally} Bonnie & Slobogin, \textit{supra} note 33, at 496-522 (general principles for improving the quality of forensic evaluation).
gently and to the best possible degree the particular issue without enlightenment from those having a specialized understanding of the subject involved in the dispute.\textsuperscript{142}

There are no studies directly comparing the dangerousness predictions of laypersons to those of mental health professionals. Given the relatively low accuracy rate achieved by the latter group, some have speculated that a judge or jury could arrive at conclusions no less valid.\textsuperscript{143} Whether or not this is true, it seems apparent that clinicians can, in a given case, provide incremental assistance to the factfinder, which is all that the Federal Rules of Evidence require.\textsuperscript{144} It is unlikely, for instance, that jurors will understand "to the best possible degree" how a particular person reacts to stress and what types of stress are most likely to trigger violence in that person without some explanation by a qualified clinician who has followed an adequate evaluation procedure. Laypersons can understand personality traits, but they can neither discern their presence nor gauge their intensity as competently as a clinician with specialized knowledge.\textsuperscript{145}

Assume for a moment that actuarial devices like those used in Michigan for parole decisions existed for all populations subjected to commitment and sentencing. Merely by consulting public records and plugging in the appropriate data, a layperson could obtain predictions with an accuracy rate comparable to that achieved by the best clinical prediction techniques. But even in this situation, clinical observations and inferences could provide information that the layperson probably would not otherwise possess. As pointed out in part I,\textsuperscript{146} actuarial devices cannot take into account all of the individual characteristics and

\textsuperscript{142} Ladd, supra note 133, at 418.

\textsuperscript{143} See, e.g., A. Stone, supra note 29, at 33 (there are many situations in which a layperson could predict dangerousness as well as the experts—for example, drug addicts in need of money); Morse, supra note 7, at 620 (reasoning that "[w]ithout hard, methodologically sound quantitative data, the guess of an expert is unlikely to be better than the guess of laypersons").

\textsuperscript{144} As Professor Bonnie and I have argued elsewhere, under the modern test, "we must ask whether 'specialized knowledge will assist the trier of fact,' not whether the factfinder can manage when left to his own devices." Bonnie & Slobogin, supra note 33, at 464 (citing Fed. R. Evid. 702).

\textsuperscript{145} Even Morse, who in general opposes participation by mental health professionals in the courtroom, recognizes a legal role for them in discerning and reporting the presence of behavior. See Morse, supra note 7, at 611-12 ("Because the expert is attuned to crazy behavior, he may help the factfinder attend to a fuller range of the actor's behavior. . . . [The expert's] special skill is observational—to perceive behaviors that nonexperts may fail to notice."). Still, Morse would not permit the professional to draw inferences from these observations about past or future behavior. See id. at 618-19.

\textsuperscript{146} See supra text accompanying notes 104-05.
tendencies that are relevant to a prediction about dangerousness.

Finally, even if actuarial predictions were the only type of prediction relied upon, experts of some type would be necessary to explain how the actuarial data were obtained and how the data should be interpreted. The methodology used in constructing and validating the Michigan device, for instance, may be open to challenge and thus require expert explication. More importantly, it is unlikely that a layperson would understand the significance of a finding, say, that someone who belongs to a group with a base rate for violence of ten percent has a forty percent chance of recidivating within a given period of time, without some explanation of the significance of base rates, false positives, and follow-up periods. As noted earlier, such testimony need not come from a mental health professional; anyone who understands statistics would probably have the requisite "specialized knowledge."

Under appropriate conditions, then, both clinical and actuarial opinions on dangerousness can qualify as expert opinions. But their admissibility is still not assured under the rules of evidence.

B. Frye and Prejudice

In *Frye*, the Court of Appeals for the District of Columbia Circuit held polygraph evidence inadmissible because the scientific theory and techniques associated with the polygraph had not, at the time *Frye* was decided in 1923, gained "general acceptance" among those qualified by education and training to understand and evaluate the instrument's reliability. The general acceptance test has since been widely adopted as the vehicle for deciding whether testimony based on data derived from various types of scientific devices—the polygraph, the voice spectrograph, and neutron activation analysis, for instance—should be admissible. A central premise of the courts following *Frye* is that when scientific evidence is involved, jurors are unable to sift out accurate from inaccurate testimony, either because they find it too difficult to

---

147 The construction of actuarial devices can be attacked in a number of ways. The sample size may not be large enough to make statistically significant generalizations. The base rate information may not be calculated, making the probability estimate less meaningful. One might also challenge the manner in which the researchers determined the characteristics of the population studied, especially to the extent those characteristics are "soft." See supra note 93 and accompanying text. The indicia that the researchers used to determine who is dangerous might also be questioned. See supra note 99 and accompanying text. The factfinder should be apprised of these possible deficiencies.

148 See supra note 125 and accompanying text.

149 *Frye*, 293 F. at 1014.

understand\textsuperscript{181} or because the aura of infallibility surrounding the expert and "science" in general causes them to assume its validity.\textsuperscript{182} Thus, the court must make the validity determination for the jury, based on its understanding of the consensus view of experts in the relevant scientific community.

Many jurisdictions abide by the general acceptance test, at least in cases involving "novel" scientific evidence.\textsuperscript{183} In \textit{In re Wilson}\textsuperscript{184} the District of Columbia Superior Court applied the test to dangerousness testimony as well and found that since the American Psychiatric Association, the American Psychological Association, and other professionals doubted the accuracy of such testimony, it should not be admissible in civil commitment proceedings.\textsuperscript{185} Some commentary echoes this view.\textsuperscript{186}

Whether the Federal Rules of Evidence incorporate the \textit{Frye} rule

\textsuperscript{183} Giannelli describes the \textit{Frye} test as "[t]he standard used most often by the courts" to assess the admissibility of novel scientific evidence. Giannelli, \textit{supra} note 150, at 1200.
\textsuperscript{185} Id. at 2115-16. See \textit{supra} text accompanying notes 5-6 for a description of the conclusions reached by the two professional organizations.

It is interesting to speculate why the courts have not applied the \textit{Frye} test to prediction testimony or to psychological testimony in general. Since neither type of evidence is particularly trustworthy, see Morse, \textit{supra} note 7, at 604-22, and since neither can be said to have a theoretical base that is widely accepted, see C. Hall & G. Lindzey, \textsc{Theories of Personality} 702-05 (3d ed. 1978); 1 J. Ziskin, \textsc{Coping with Psychiatric and Psychological Testimony} 104-28 (3d ed. 1981), application of the \textit{Frye} rule would arguably require their exclusion. Yet, except for \textit{Wilson}, no decision has done so.

One reason testimony by mental health professionals is accepted so readily by the courts is that it has never been regarded as "novel"; it has long been an everyday feature of the justice system. A second, more logical reason is that it does not possess the aura of wizardry that testimony based on mechanical or chemical tests possesses. Closely associated with this notion may be a belief that expert testimony by clinicians does not as easily sway the jury or judge as does testimony based on mechanical or scientific techniques. The psychiatrist's explanation of a person's mental state is greeted with more natural skepticism than the opinion put forth by the polygraph examiner or the expert interpreter of neutron activation analysis.

As argued later in this Article, see \textit{infra} text accompanying notes 174-78, this latter assumption is mistaken in the context of clinical predictions offered by the state. Nonetheless, using the \textit{Frye} rule to combat the problem is inappropriate because it acts to bar all clinical testimony, even when it is contested by an expert on the other side. See \textit{supra} text accompanying notes 149-52.

\textsuperscript{186} See, e.g., Dix, \textit{supra} note 7, at 19-21 ("On balance, the general mental health community seems the appropriate one to employ under \textit{Frye}."); Note, \textit{supra} note 114, at 1074 n.39, 1088 & n.141; cf. Morse, \textit{supra} note 7, at 626.
is open to question. What is clear is that most scholars who have investigated its use by the courts have found the Frye test to be both unnecessary and unduly burdensome. On the latter score, there are obvious practical difficulties in determining which scientific community is the relevant one for purposes of gauging general acceptance and in measuring and interpreting the community's acceptance of the scientific evidence. In the dangerousness context, for instance, is the relevant scientific community solely forensic practitioners (who would probably vouch for the validity of their predictions), all mental health professionals (who probably would not), or all professionals who are familiar with actuarial as well as clinical techniques? Assuming an appropriate group is selected, what must these professionals endorse—predictive accuracy generally, the procedures used to make these predictions, or the qualifications of the individuals making them? And how many professionals constitute "general" acceptance—merely a majority or some larger proportion? If the requisite

157 See S. Saltzburg & K. Redden, Federal Rules of Evidence Manual 452 (3d ed. 1982) ("It is not clear whether Rules 702 and 703 are intended to codify the Frye test or whether they establish a less demanding standard for scientific evidence.").

158 See, e.g., C. McCormick, supra note 109, § 203, at 491 ("'General scientific acceptance' is a proper condition for taking judicial notice of scientific facts, but not a criterion for the admissibility of scientific evidence."); J. Richardson, Modern Scientific Evidence § 2.5 (1974); J. Wigmore, Evidence § 990 (1923) (not addressing Frye, but requiring only "the preliminary testimony of a scientist that the proposed test is an accepted one in his profession and that it has a reasonable measure of precision in its indications"); Giannelli, supra note 151, at 1208-31 (discussing the difficulties in application and problematic results of the Frye test); cf. A. Moenssens & F. Inbau, Scientific Evidence in Criminal Cases § 1.03, at 5 (2d ed. 1978). In a recent symposium sponsored by the American Bar Association and the American Association for the Advancement of Science involving over 20 lawyers and scientists, a consensus was reached that the Frye test was unworkable because of the considerable difficulties in determining precisely what "general acceptance" means. The group also appeared to feel, however, that the judge must retain some authority to screen scientific evidence before it is introduced. See Symposium on Science and the Rules of Evidence, 99 F.R.D. 187, 232, 234 (1983) (statements of Andre Moenssens and moderator, respectively). This symposium is discussed further infra note 178.

159 Professor Dix, who discusses this subject at greater length, see Dix, supra note 7, at 19-21, points out that the willingness of forensic clinicians to provide evaluations may be the result of the law's demands rather than confidence in the reliability of their predictions. Id. at 20.

160 See supra notes 5-6 and accompanying text. A survey conducted by Kahle and Sales found that among those psychiatrists and psychologists surveyed, the mean estimate of predictive accuracy ranged from 40% to 46%. See Kahle & Sales, Due Process of Law and the Attitudes of Professionals Toward Involuntary Civil Commitment, in New Directions in Psycholegal Research 265, 279 (1980).

161 See generally Giannelli, supra note 150, at 1210-15 (discussing the confusion among courts and commentators as to whether the Frye standard requires general acceptance of the scientific technique or of both the underlying principle and the technique applying it).
number of members of the relevant group feel that dangerousness predictions can be made accurately forty to forty-five percent of the time, does this mean that they "accept" the validity of such predictions if these limits are made clear, or must they guarantee its absolute accuracy before it will be admissible in court? ¹⁶²

An even more important criticism of Frye for present purposes is that it creates an unnecessary exception to the traditional relevance rule, which admits all relevant evidence unless there is some reason for exclusion, such as its potential for misleading the jury, prejudicing one of the parties, or wasting time. ¹⁶³ Because evidence is not relevant unless it has a minimum degree of accuracy, and relevant evidence is not admissible unless its probative value outweighs its negative effects on accurate factfinding, ¹⁶⁴ the accuracy and prejudice concerns that form the basis for the Frye rule are already taken into account by the traditional relevance analysis.

The drawback to the Frye rule or any similar "screening" rule ¹⁶⁵ is that it assumes a substantial amount of prejudice will occur whenever scientific evidence is presented. It thus inhibits judicial investigation into the misleading or prejudicial impact of different types of scientific evidence and the circumstances under which such evidence is introduced. In Wilson, for instance, the court virtually ignored the distinctions between actuarial and clinical evidence and between testimony introduced by the state and testimony offered by the defense; rather, it simply prohibited all expert psychiatric testimony on dangerousness. ¹⁶⁶

¹⁶² For instance, Kozol, who was aware that his predictions of dangerousness were wrong over two-thirds of the time, still claimed that "dangerousness can be reliably diagnosed and effectively treated." Kozol, Boucher & Garofalo, supra note 50, at 392.

¹⁶³ See authorities cited supra note 158. McCormick's statement is representative:

Any relevant conclusions which are supported by a qualified expert witness should be received unless there are other reasons for exclusion. Particularly, probative value may be overborne by the familiar dangers of prejudicing or misleading the jury, and undue consumption of time. If the courts used this approach, instead of repeating a supposed requirement of "general acceptance" not elsewhere imposed, they would arrive at a practical way of utilizing the results of scientific advances.

C. McCormick, supra note 109, § 203, at 491.

¹⁶⁴ FED. R. EVID. 403.

¹⁶⁵ See infra note 179.

¹⁶⁶ The court referred only once to the prejudice issue:

Given the fact that the APA itself believes that psychiatrists make inaccurate predictions of future dangerousness in at least two out of every three cases . . . as well as the prejudicial impact psychiatrist[s] testimony predicting dangerousness has on the fact finder, it is clear that expert psychiatric testimony on this point is not admissible.

Wilson, 33 CRIM. L. REP (BNA) at 2116 (citation omitted).
Whenever the admissibility of any type of scientific evidence is at issue an analysis of prejudicial impact should be undertaken. This analysis should focus, I think, on balancing the probative value of the evidence against two variables: the complexity of the proffered testimony and the manner in which the other side intends to challenge the scientific findings.

Testimony based on highly sophisticated scientific techniques or principles may tend to overwhelm even a conscientious judge or juror to the point where the underlying data are disregarded and only the "bottom line" conclusion drawn from these data becomes important.\textsuperscript{167} Grasping how a polygraph works, for instance, requires knowledge of various properties of human physiology and the theories that permit a polygraph operator to make inferences from certain types of physiological reactions.\textsuperscript{168} Whether the trier of fact has the capacity or the patience to understand these factors or whether, instead, it decides to let the machine "speak for itself" is the paramount concern here.\textsuperscript{169}

Clinical predictions are unlikely to be as intimidating to the layperson as many other types of expert opinion evidence. For the most part they involve commonsense concepts such as stress and predisposition to anger and make seemingly logical connections between observed characteristics and violence-proneness.\textsuperscript{170} Actuarial predictions may be somewhat more difficult to fathom. Understanding the concept of base

\textsuperscript{167} See, e.g., Giannelli, \textit{supra} note 150, at 1225-27 (describing court's handling of neutron activation analysis).

\textsuperscript{168} The polygraph operates on the assumption that the sympathetic nervous system is activated "during stress situations and serves to prepare the organism to deal with a threat more effectively through the stimulation of a series of physiologic changes," including vaso-constriction in the peripheral blood vessels, vaso-dilation in the skeletal and cardiac muscles, dilation of the lung passages, strengthening of heart contractions, and increased perspiration in the palms of the hands and the soles of the feet. Abrams, \textit{Polygraphy Today}, 3 NAT'L J. CRIM. DEF. 85, 88 (1977). It is the various measurements made of these physiological changes that tell the polygraph operator when the subject is experiencing fear, leading to the conclusion that the subject is lying. \textit{Id.} at 89. However, the inference that certain physical variations connote fear and the further inference that fear connotes lying have been questioned by others. \textit{See}, e.g., Axelrod, \textit{The Use of Lie Detectors by Criminal Defense Attorneys}, 3 NAT'L J. CRIM. DEF. 107, 124-25 (1977). There are several other theoretical aspects to polygraphs which must be considered in determining validity in a particular case. \textit{See generally} Abrams, \textit{supra}, at 100-05.

\textsuperscript{169} \textit{See generally} Imwinkelried, \textit{The Standard for Admitting Scientific Evidence: A Critique from the Perspective of Juror Psychology}, 28 \textit{VILL. L. REV.} 554 (1982-83) (concluding that in most cases jurors can understand scientific evidence).

\textsuperscript{170} To the extent that a clinician relies on "psychodynamic formulations" involving psychoanalytic constructs, her testimony will depart from everyday understandings about psychology. But even these types of opinions are intuitively comprehensible. \textit{See generally} Morse, \textit{Failed Explanations and Criminal Responsibility: Experts and the Unconscious}, 68 \textit{VA. L. REV.} 971, 985-91 (1982) (discussing the "literary" quality of psychoanalytic testimony).
rates or the methodology used to collect group statistics may initially be
bewildering to some judges or jurors unfamiliar with statistical par-
lance. Nonetheless, compared to many types of scientific evidence, this
type of prediction testimony is not overly technical and should not tax
individuals willing to be educated.

Thus, the more important variable in judging the potential preju-
dicial impact of prediction testimony (and probably of most scientific
testimony) is how the testimony is to be challenged. Uncontested or
ineffectively contested testimony, regardless of its inaccuracy, will in all
likelihood unduly influence the factfinder. Of course, this probability
exists whether the testimony is expert or lay; what must be recognized,
however, is that even when used competently, traditional techniques for
challenging the lay witness may not work when the witness is an ex-
pert. Arguably, the only satisfactory rebuttal of an expert is another
expert, at least when the expert to be challenged is proffered by the
state in a criminal adjudication.

Cross-examination is usually viewed as an adequate means of ex-
posing the shortcomings of the typical witness. For instance, a good
cross-examiner can effectively communicate the perceptual failings of
an eyewitness to the factfinder because the factfinder can personally
relate to those failings. But when the witness is an expert, if the only
means of attack is through cross-examination, any undue influence pro-
duced by the testimony may be more difficult to dissipate. No matter
how simple the expert’s opinion, its purported basis will be the special-
ized skills of a “master” and not the ordinary perceptual abilities of the
typical witness. The factfinder may not feel qualified to judge such
testimony because it does not perceive its own competence as being
equivalent to that of the expert. Thus, the cross-examiner of an expert
begins at a disadvantage.

Moreover, the credibility of a cross-examiner’s attempts to expose
weaknesses in the expert’s opinion formation process or to suggest in-
terpretations other than those advanced by the witness is compromised
by the fact that the lawyer is not an expert. Without concrete evidence,
lay or expert, to back up the questioner’s assertions, the effectiveness of
the rebuttal will probably be minimal: the expert will naturally con-
strue any ambiguity in her favor, and the factfinder, having nothing

that cross-examination is not as effective at exposing shortcomings of a witness when
the witness is an expert because “the expert may claim that his testimony is based not
on his ability to perceive, remember, etc., but on scientific data or principles that are
especially reliable”).

172 Clinicians often “selectively perceiv[e] and emphasis[e] only those characteristics
and attributes of their patients which are relevant to their own preconceived system
else to go on, is unlikely to discount this resolution of the issue. Additionally, of course, to the extent that the lawyer does not comprehend the scientific principles at stake, cross-examination becomes even less likely to have an impact.

Suggesting that the particular scientific technique or principle upon which the expert relies is of questionable validity may be an effective means of challenging the witness's authority, especially if another expert, rather than the lawyer, can present the data. But this stratagem will probably not have the impact one might expect it would. Research on the well-documented "representativeness heuristic" indicates that people tend to lend significantly more credence to case-specific information than to generalized statistics. Thus, for instance, evidence that polygraph tests are often inaccurate may be discounted by jurors presented with testimony that this defendant lied or told the truth. Judges or jurors can tell themselves, with some basis, that regardless of its overall inaccuracy rate the polygraph is not wrong this time.

Most importantly for present purposes, the factfinder's natural tendency to disregard aggregate data when case-specific information exists is magnified when the latter type of information is offered by the state in a proceeding against an individual. In such cases, the judge and the jurors are aware that the state believes it has a case against the person; consciously or unconsciously this fact may have a powerful effect. The factfinder could easily come to believe that even if the sci-

of thought." Pasamanick, Dinitz & Lefton, Psychiatric Orientation and Its Relation to Diagnosis and Treatment in a Mental Hospital, 116 AM. J. PSYCHIATRY 127, 131 (1959). Festinger's concept of "cognitive dissonance," that individuals selectively avoid or devalue information that is inconsistent with their decisions and increase the weight given information that supports their decisions, is also relevant in this regard. See L. FESTINGER, CONFLICT, DECISION, AND DISSONANCE 5-6 (1964).

173 For a description of this research, conducted mostly by Amos Tversky and Daniel Kahneman, see Saks & Kidd, Human Information Processing and Adjudication: Trial by Heuristics, 15 LAW & SOC'Y REV. 123, 132-37 (1980-81). Specifically, with respect to dangerousness, Saks and Kidd conclude that the "consistent overprediction of dangerousness is in part due to experts' insensitivity to the low frequency of such behavior and reliance on the representativeness heuristic wherein the person threatened with commitment is compared to the stereotype of a dangerous person." Id. at 133 (citing Kahneman & Tversky, Subjective Probability: A Judgment of Representativeness, 3 COGNITIVE PSYCHOLOGY 430 (1972)). If experts do not respond to generalized data, it is unlikely that laypersons will.

174 A considerable amount of research convincingly demonstrates the existence of a "hindsight effect." For a summary of this research, see Saks and Kidd, supra note 173, at 143-45. As the authors put it, "input information is perceived as far more predictive of the outcome once the outcome is known than when the outcome is still in doubt." Id. at 144. They suggest that a criminal trial may produce this effect since the factfinder is given the "answer"—the defendant—before it is asked to consider the evidence and to decide whether the evidence proves the suggested conclusion that the defendant commit-
cientific evidence upon which the state is relying is known to be wrong a substantial percentage of the time, it is not wrong in this case because this individual had already been pinpointed by the state.

If in addition to cross-examining the expert's opinion-formation process and presenting data suggesting the general fallibility of the scientific evidence, the defense offers other, case-specific information casting doubt on the opinion evidence, any erroneous impressions engendered by an expert's testimony can perhaps be more easily dispelled. Recent research on the effect of polygraph evidence on jurors suggests that when jurors are provided with both the accuracy rate of polygraph tests generally and some colorable evidence suggesting that the version of the facts supported by the polygraph result in the case is wrong, they usually resist heavy reliance on the scientific results. A recent study indicates, however, that even under these circumstances jurors appear to be less willing to reach a conclusion contrary to the polygraph results when the results are introduced by the state. This finding supports...
the contention made above that scientific evidence is particularly potent when it confirms the state's decision to prosecute.

Whatever the correct resolution of the admissibility issue in polygraph cases, such a conclusion is compelled when the scientific evidence sought to be introduced is testimony suggesting that someone will be violent in the future. One cannot prove future "safeness" with the conclusiveness that one can show innocence of something that has already occurred. Thus, a lack of case-specific expert evidence places the "safe" person subjected to a commitment or sentencing proceeding at a considerably greater disadvantage than the innocent defendant. Without expert testimony, a defense lawyer seeking to introduce individualized evidence in commitment and sentencing proceedings is relegated to "good character" testimony and suggestions that factors such as age or environment will curtail future violence.\(^{177}\) By contrast, an innocent defendant seeking to challenge a polygraph test suggesting that she fabricated her alibi should usually be able to muster concrete evidence supporting her story in the form of witnesses and documents. Clearly, evidence presented by the first individual will be much less effective against the pronouncements of an expert.

From the perspective of the factfinder deliberating in commitment and sentencing proceedings, defendants are in essence contending that they will never do again what they have just done. When the state offers expert testimony encouraging the factfinder to follow its natural tendency to disbelieve such an argument, the risk of an erroneous decision (remembering the low base rate for violence) is extremely high. Neither cross-examination of the state's expert, data showing the inaccuracy of prediction generally, nor case-specific lay testimony suggesting "safeness" is likely to dissuade the factfinder from believing the defendant to be dangerous. Only if the state's expert is answered in kind is there some chance at an effective challenge.\(^{178}\)
Therefore, under traditional relevance analysis the state should not be allowed to introduce dangerousness testimony unopposed by a defense expert unless it can show that the testimony proffered possesses a high degree of validity. Actuarial predictions that rely on methodologically sound research and hard variables are accurate at what they purport to do, which is to identify the statistical likelihood that a person with the subject’s characteristics will act violently in the future. So long as the expert does not venture beyond statistical probabilities into conclusions that the person is dangerous or not dangerous—a step that would be beyond the bounds of her expertise—the probative value of this type of actuarial prediction makes the possibility of misleading the factfinder relatively remote.\(^1\)

Clinical predictions,\(^{180}\) on the other hand, have low probative value. If expert, case-specific testimony is offered by both sides, this fact restricted budgets.”); id. at 218 (comments of Saltzburg) (“Since most scientific evidence is introduced by the prosecution, and since judges may tend to favor the prosecution, which has the burden of proof, over the defense, Frye reduces the possibility of the prosecution influencing the jury with evidence not available to the defense.”).

Although they do not directly address the point, these comments imply that when the defense does have an expert, the argument for the screening approach is less compelling. See id. at 227 (comments of Underwood) (“I am not too bothered about the biases of the experts so long as both sides are represented by competent witnesses who respond to the scientific questions.”); cf. Giannelli, supra note 150, at 1248 (proposing that, in criminal cases, the state bear the burden of proving that the scientific evidence it seeks to introduce is valid beyond a reasonable doubt, while the defense need prove the accuracy of expert evidence it proffers only by a preponderance of the evidence); Moenssens, Admissibility of Scientific Evidence—An Alternative to the Frye Rule, 25 WM. & MARY L. REV. 545, 573 (1984) (suggesting that judicial involvement in assessing reliability of scientific evidence is important “particularly if one of the litigants is less prepared or has less opportunity to secure expert testimony.”). Of course, the defendant’s expert testimony would always have to get past the relevance and reasonable reliance hurdles, and the evidence would need to be of the type a factfinder could understand and find helpful.

One justification advanced for the Frye rule has been to guarantee that a “minimal reserve of experts exists who can critically examine the validity of a scientific determination in a particular case.” United States v. Addison, 498 F.2d 741, 744 (D.C. Cir. 1974). Assuming that this reserve of experts exists and that the traditional evidentiary requirements for expert evidence are met, it is unclear why testimony based on a particular scientific technique or principle should be barred solely because it has not gained general acceptance.

\(^{179}\) Even hard actuarial data may be subject to challenge on methodological grounds. See supra note 147. Yet, this challenge does not have to come from an expert with case-specific information; rather, it can be a neutral critique of the methods used in collecting and interpreting the statistical data.

\(^{180}\) As used here, the phrase “clinical predictions” also encompasses actuarial predictions relying upon “soft” variables. Even if prediction testimony were limited to conclusions concerning violence-inducing and violence-inhibiting factors, as I advocated earlier, see supra text accompanying notes 126-28, prejudice concerns arise. Testimony for the state will presumably focus on the former type of factors and strongly imply that the defendant is dangerous. There is no evidence to suggest such information is any more accurate than a conclusory opinion derived from it.
should not be a basis for exclusion; the factfinder should be equipped to evaluate fairly the reliability of the testimony. If, however, no expert challenge of the state's prediction testimony is proffered, or if the only such challenge is general in nature, the prejudicial potential of dangerousness testimony increases significantly and should lead to its exclusion.

This analysis should apply whether the factfinder is a judge or a jury. Arguably, a judge is by training and necessity adept at resisting prejudicial or misleading impressions. Whatever the case may be in other situations, however, when expert predictive testimony is the evidence in question, judges are usually swayed by it, despite the fact that it is often wrong. There is no reason, beyond tradition, for distin-

181 See C. McCormick, supra note 109, § 60, at 137-38.
182 This claim is most easily documented in the noncapital sentencing context. A survey of the hearings under Maryland's defective delinquent program at Patuxent indicated that, despite the fact that the staff's prediction of dangerousness was "contested" in 80% to 100% of the cases (although not by opposing experts), judicial agreement with the staff's sentencing recommendation was 86%. See Hoff, Patuxent and Discretion in the Criminal Justice System, 5 Bull. Am. Acad. Psychiatry & L. 144, 154 (1977). Similarly, the courts released only 31 (or 12%) of the 257 patients that Kozol and his staff originally diagnosed as dangerous. Kozol, Boucher & Garofalo, supra note 50, at 378. Moreover, as Dix points out, several of the patients were probably released for procedural or other reasons having nothing to do with the courts' conclusions concerning dangerousness. Dix, supra note 70, at 538. Finally, Bohmer found that the correspondence between psychiatric sentencing recommendations and the judge's decision was proportionately highest during the years in which the psychiatrists made the most recommendations for imprisonment and lowest during the years in which the lowest proportion of prison recommendations were made. See Bohmer, Bad or Mad: The Psychiatrist in the Sentencing Process, 4 J. Psychiatry & L. 23, 36 (1976).

There are no data on the relation between expert opinions on dangerousness and judicial decisionmaking in the capital sentencing or criminal commitment contexts. In the former context, most decisions are made by juries in any event. See, e.g., Okla. Stat. Ann. tit. 21, § 701.10 (Supp. 1983-84) (jury trial unless waived); Va. Code § 19.2-264 (Supp. 1984) (same); Wash. Rev. Code Ann. § 10.01.060 (Supp. 1984-85) (jury trial unless within the exclusive jurisdiction of the superior court). With respect to criminal commitment, the most relevant data on the correlation between judicial determinations and expert opinion come from studies of the civil commitment process, which involves similar (although admittedly not identical) issues. In the latter type of proceeding, the concordance between psychiatric opinion and court decisions is extremely high. See Hiday, Reformed Commitment Procedures: An Empirical Study in the Courtroom, 11 Law & Soc'y Rev. 651, 662 (1977) (100% concordance when violent act predicted); Wenger & Fletcher, The Effect of Legal Counsel on Admissions to a State Mental Hospital: A Confrontation of Professions, 10 J. Health & Soc. Behav. 66, 68 (1969) (100% concordance); Special Project, The Administration of Psychiatric Justice: Theory and Practice in Arizona, 13 Ariz. L. Rev. 1, 60 (1971) (96% concordance).

Professor Saltzburg has argued that the reliability of scientific evidence should be established "because juries, and judges also, are likely to accept evidence that is unchallenged at trial." Saltzburg, supra note 171, at 217 (emphasis added). Cf. Teitelbaum, Sutton-Barbere & Johnson, Evaluating the Prejudicial Effect of Evidence: Can Judges Identify the Impact of Improper Evidence on Juries?, 1983 Wis. L. Rev. 1147, 1197
guishing between judge and jury when assessing the impact of unop-
posed expert dangerousness testimony.

C. Letting the Defendant Choose

The conclusion that clinical dangerousness testimony that is not
challenged in kind tends to be substantially prejudicial to the defense
leaves two options. The first is to force the defense to choose between
introducing expert clinical testimony or waiving its use in any case in
which the state wants to introduce such evidence. This option is not
practical, nor is it consonant with the deeply ingrained defendant-orien-
tation of our criminal justice system. Experts may not be available to
the defense for financial reasons or because they feel they have noth-
ing helpful to say (which does not necessarily mean that they think the
defendant is dangerous, but may merely indicate that they cannot, given
the vagaries of the predictive endeavor, reach an honest opinion that the
defendant is not dangerous). In either situation the failure of the de-
fense to present expert testimony cannot fairly be construed as an af-
firmative decision to forego its use.

The second and only sensible option is to give the defendant con-
trol over the introduction of clinical prediction testimony. If the defense
decides not to use such testimony, the state should be barred from intro-
ducing its own expert. If the defense does rely on clinical prediction
evidence, then any countering clinical opinion introduced by the state is
unlikely to be overly prejudicial because both sides will have case-spe-
cific expert opinions. Unlike the first option, this "defendant-first" ap-
proach does not permit the state to dictate the defense's strategy, nor
does it require a probably futile inquiry into the reasons behind a de-
fense decision to forego clinical testimony.

(concluding that the assumption "that judges can accurately assess the prejudice created
by an item of proof—is doubtful.").

Most defendants subjected to sentencing and commitment proceedings are indi-
gent. Some states still do not provide the indigent with funds to pursue an independent
consultation for criminal trial purposes, let alone in the civil and criminal commitment
contexts. See Recent Developments, Constitutional Law—Equal Protection—Refusal
to Provide Expert Witness for Indigent Defendant Denies Equal Protection, 59 WASH.
U.L.Q. 293, 320 n.18 (1984); cf. Lewin, Indigency—Informal and Formal Procedures
to Provide Partisan Psychiatric Assistance to the Poor, 52 IOWA L. REV. 458, 474-80
(1966). In those states that provide financial assistance in the civil and criminal com-
mitment contexts, usually either the amount of money available or the purpose for
which it may be used is limited. See, e.g., COLO. REV. STAT. § 16-13-214 (1978)
(reimbursement only for examination of sex offenders); MD. HEALTH-GEN. CODE
ANN. § 16-302 (1982) (reasonable fee for evaluation if court-ordered, but not if ob-
tained solely at behest of individual); TEX. STAT. ANN. art. 26.05(d) (Vernon 1979)
(up to $500 per defendant); VA. CODE § 19.2-175 (1983) (up to $200 per defendant).
Moreover, the approach suggested here has a time-honored analogue. The character evidence rule,\textsuperscript{184} which exists in some form in every state and the federal courts,\textsuperscript{185} prohibits the prosecution from introducing at trial evidence concerning the defendant's character unless the defendant first raises the issue.\textsuperscript{186} The rule's prohibition is motivated by the same type of evidentiary concerns discussed in the last section. Evidence of bad character is relevant to the question whether the defendant committed the crime; it shows that the defendant has a tendency to commit crimes or other bad acts and thus might have committed this one. But against the probative value of such evidence must be weighed the possibility that proof of bad character will lead the factfinder to convict the defendant merely because she has been a bad person, rather than because she committed the actus reus and had the mens rea for the offense. Because the risk is so great that negative character evidence will produce an erroneous decision, its introduction is barred unless and until the defendant decides that its potential for misleading the factfinder can be overcome (or at least neutralized) by countervailing evidence.\textsuperscript{187}

Thus, the character evidence rule serves as a well-established precedent for the type of rule proposed here. The defendant-first approach is not a new evidentiary concept. However, unique conceptual and practical problems that arise in applying a defendant-first rule to clinical dangerousness testimony should be recognized. The following three subsections explore the most important of these issues.

\textsuperscript{184} Fed. R. Evid. 404(a)(1) reads:

Evidence of a person's character or a trait of his character is not admissible for the purpose of proving that he acted in conformity therewith on a particular occasion, except: (1) Character of accused. Evidence of a pertinent trait of his character offered by an accused, or by the prosecution to rebut the same . . . .

\textsuperscript{185} See D. Louisell & C. Mueller, 2 Federal Evidence 82 n.76 (1978); see also Fed. R. Evid. 404 advisory committee note (the rule "is so deeply imbedded in our jurisprudence as to assume almost constitutional proportions and to override doubts of the basic relevancy of the evidence").

\textsuperscript{186} There are several exceptions to the character evidence rule, most of which permit the prosecution to produce evidence of prior crimes when relevant to the actus reus or mens rea. See C. McCormick, supra note 109, § 190, at 447-54.

\textsuperscript{187} See id. § 191, at 454 ("The objection is not that the evidence is not relevant [for the purpose of showing the defendant is more likely to commit a crime] but that its value is overbalanced by the danger of undue prejudice which the evidence would arouse."); see also Michelson v. United States, 335 U.S. 469, 476 (1948) ("The overriding policy of excluding such evidence, despite its admitted probative value, is the practical experience that its disallowance tends to prevent confusion of issues, unfair surprise and undue prejudice.") (footnote omitted).
1. What Type of Evidence May the State Use to Prove Dangerousness?

If the defense can prevent the introduction of clinical predictions of dangerousness, the state will be deprived of one of its primary means of proving dangerousness in those cases in which the defense exercises that privilege. Yet there are other means of proving dangerousness: specifically, actuarial data and proof of prior dangerous acts through lay testimony and documentary evidence.

Since hard actuarial evidence is accurate at what it purports to do, it should generally be admissible as part of the state's case, even if the defense does not rely on expert testimony. Fortunately, as indi-

---

188 Two nonevidentiary objections to the use of actuarial prediction in the courtroom merit brief attention. First, some commentators have expressed discomfort with legal reliance on probability statements, both generally, see, e.g., R. Dworkin, Taking Rights Seriously 15 (1977); Tribe, supra note 104, at 1372-75, and in the context of dangerousness predictions in particular, see, e.g., Von Hirsch, Prediction of Criminal Conduct and Preventive Confinement of Convicted Persons, 21 Buffalo L. Rev. 717, 744-50 (1972). This sentiment is based primarily on a belief that the system's reliance on statistical methods to assist judicial decisionmaking views the individual as a composite of quantifiable characteristics rather than as an autonomous human being and therefore infringes fundamental individual prerogatives. Whatever the merit of this criticism in general, its force is diminished under the approach advocated here, which allows the presentation of nonstatistical information by both the state (in the form of dangerous acts and clinical rebuttal testimony) and the individual.

A more troublesome concern is with the specific data underlying an actuarial prediction, rather than the philosophical soundness of the actuarial process itself. The law may not relish relying upon certain types of information (for example, race, sex, or socioeconomic status) in distinguishing between those who will receive confinement or enhanced punishment and those who will not. For instance, it has been argued in a different context that whatever the probability correlates are between race and crime, the equal protection clause forbids use of race in making a decision to stop an individual upon "reasonable suspicion" or to arrest upon "probable cause," even when ancestry is only one of several factors considered in making the decision. See Johnson, Race and the Decision to Detain a Suspect, 93 Yale L.J. 214, 241-50 (1983). Although this position appears to have been rejected by the Supreme Court, see United States v. Martinez-Fuerte, 428 U.S. 543, 563-64 (1976) (in efforts to apprehend illegal aliens, border patrol may constitutionally rely on factors such as Mexican ancestry in questioning of passengers in cars at checkpoints in vicinity of Mexican border), it is not without merit. A similar argument could be made in the prediction context. Moreover, race is not the only "suspect class" for purposes of equal protection analysis. One could contend that gender, social class, and even age should not form the basis for a prediction. Cf. Johnson, supra, at 251-55 (suggesting that the use of wealth and gender as factors in the detention decision context may require heightened scrutiny).

This topic is too complex to be discussed adequately here. What should be recognized is that if variables such as race and gender are declared offbounds for purposes of actuarial prediction, obtaining useful probability estimates will become more difficult, since these factors are statistically correlated to violence-proneness. On the other hand, actuarial devices that use less constitutionally suspect data can be developed. For example, the Michigan scale described in part I, see supra notes 81-82 and accompanying text, relies entirely on convictions, arrests, descriptions of criminal activity, institutional misconduct, and marital status.
icated in part I, for some of those populations whose violence-proneness is legally relevant statistical information is scarce.\textsuperscript{189} Methodological obstacles and the existence of easily accessible clinical prediction testimony have combined to retard its development.\textsuperscript{190}

Under a defendant-first approach, if the defense were to decide not to use clinical prediction testimony—thereby barring the introduction of such testimony by the state—and relevant actuarial data were not available, the state should still be able to introduce evidence describing prior dangerous acts. Both the empirical\textsuperscript{191} and clinical\textsuperscript{192} literature suggest

Moreover, it should be noted that underlying this discussion is the false assumption that clinical prediction does not rely on “inappropriate” criteria. In fact, clinical prediction may often be heavily influenced by race or gender-based distinctions, whether the evaluator is aware of it or not. Cf. Allon, Sex, Race, Socioeconomic Status, Social Mobility, and Process—Reactive Rating of Schizophrenics, 153 J. NERVOUS & MENTAL DISEASE 343, 348 (1971) (finding overrepresentation of blacks and males among persons rated as “process schizophrenics”); Rubin, Prediction of Dangerousness in Mentally Ill Criminals, 27 ARCHIVES GEN. PSYCHIATRY 397, 405 (1972) (“[T]he poor, the mentally incompetent, the drifter, and the black are more likely to be labeled [dangerous] for social reasons unrelated to any violent behavior . . . .”). Arguably, actuarial prediction promotes greater fairness than clinical prediction because it explicitly recognizes the variables relied upon, whereas clinical prediction allows the conscious or unconscious submergence of untidy evaluative factors. See Underwood, supra note 94, at 1429-30.

\textsuperscript{189} See supra text accompanying notes 97-98.

\textsuperscript{190} If the defendant-first approach were adopted, this lack of research might lead to some inappropriate practices. For instance, the court would have to guard against clinical testimony in the guise of actuarial data. Unless the actuarial prediction specifies a particular probability that violent behavior will occur, it is no more reliable than a clinical prediction and should be prohibited. Thus, for example, a conclusion by an expert that an individual is “likely” to act out violently because it is “well-known” that young males with two prior arrests “frequently” recidivate should not be admissible unless the defense uses clinical prediction testimony.

There may also be a tendency, at least until more comprehensive actuarial information is developed, to read too much into or misinterpret statistical information. Suppose an 18-year-old male has one chance in 100 of committing an antisocial act, while members of the general population have one chance in 500. These facts are reliable, as far as they go, and they would be material in any proceeding attempting to predict the dangerousness of an 18-year-old male. Yet these data have little probative value, given the low probabilities involved, and may be significantly misleading if the factfinder focuses on the implication that a young male is five times more likely than the “normal” person to behave violently. For this reason, courts should carefully consider the admissibility of extremely low probability estimates.

The temptation to “add together” probability assessments to suggest a higher likelihood of violence must also be avoided. Mere probabilities that an 18-year-old male has one chance in 100 of arrest, an opiate user one chance in 20, and a prior convict one chance in ten do not warrant the conclusion that an 18-year-old male drug addict with one prior arrest must have better than one chance in ten of recidivating. Actuarial variables are not necessarily independent of one another. See J. MONAHAN, supra note 28, at 76 (e.g., “the relevance of race in a person with an extensive record of violence appears minimal or non-existent”). Only if group data exist for a sizeable population with characteristics identical to those of the individual in question should such data be admissible when the defense is not relying on clinical predictions.

\textsuperscript{191} See sources cited supra note 91 and accompanying text.

[Footnote 192 appears on page 152.]
that the number and type of prior dangerous acts committed by an individual are the most relevant factors in a prediction of her future behavior.\textsuperscript{193} Although the term "dangerous act" can encompass a wide range of behavior, it does not necessarily include any past criminal or bad act. The relevance of particular prior conduct will depend upon the meaning of "dangerousness" in the specific legal context. If, as the Supreme Court seemed to suggest in Jones \textit{v. United States},\textsuperscript{194} larceny is dangerous behavior for purposes of criminal commitment, then evidence of past thefts would be admissible, even though no one was harmed or threatened. On the other hand, such evidence may not be admissible in a capital sentencing proceeding concerned with determining the defendant's potential for committing serious bodily harm in the future.\textsuperscript{195}

In the criminal commitment and sentencing contexts, there will always be evidence of at least one relevant dangerous act—that which

\textsuperscript{192} See \textit{supra} note 85 and accompanying text.

\textsuperscript{193} Although its pertinence to the dangerousness issue is the most potent reason for admitting evidence of past dangerous acts, there are also other bases for permitting its introduction in commitment and sentencing proceedings. Professor Underwood has argued that in choosing a predictive variable, several characteristics, in addition to predictive power, are to be preferred. See Underwood, \textit{supra} note 94, at 1432-42. Predictors that are capable of objective and reliable scoring, and thus not subject to mischaracterization, and predictors that are intuitively (as well as statistically) related to what is being predicted, thus improving their perceived legitimacy as predictive tools, should receive precedence. \textit{Id.} at 1442-47. Furthermore, Underwood suggests that prediction be based on factors that are "controllable" rather than immutable. The objective here is to provide society and those subject to the prediction process with some basis for believing that the consequence of the prediction is merited rather than imposed arbitrarily due to traits for which the individual is not to blame. \textit{Id.} at 1432-42.

As a predictor of dangerousness, violent acts possess all of these attributes to some degree. They are usually easily categorized and described, although there may occasionally be dispute over whether or how a particular act occurred (when, for instance, the records show an arrest rather than a conviction, see \textit{infra} note 196). Also, violent behavior is clearly related to dangerousness on a commonsense level. Finally, a person predicted to be dangerous because of past violent acts can conscientiously be said to "deserve" the consequences of the prediction, in the sense that the acts were not predetermined in the same way that one's ancestry or gender is. \textit{But cf.} Von Hirsch, \textit{supra} note 188, at 750-53 (arguing that confinement based upon prediction of future dangerousness cannot be justified by reference to concept of punishment for the prior offense). Thus, proof of prior violent acts in a proceeding designed to determine dangerousness is appropriate for a number of reasons beyond its obvious relevance to the issue.

\textsuperscript{194} 103 S. Ct. 3043 (1983). In response to the petitioner's argument that dangerousness cannot be proved for purposes of criminal commitment by proof of a nonviolent crime against property, the majority quoted from an opinion Chief Justice Burger had written while sitting on the District of Columbia Circuit: "[T]o describe the theft of watches and jewelry as "non-dangerous" is to confuse danger with violence. Larceny is usually less violent than murder or assault, but in terms of public policy the purpose of the statute is the same as to both." \textit{Id.} at 3050 n.14 (quoting Overholser \textit{v. O'Beirne}, 302 F.2d 852, 861 (D.C. Cir. 1961) (Burger, J.)).

\textsuperscript{195} See \textit{supra} note 20 for a definition of dangerousness under typical capital-sentencing statutes.
triggered the proceeding. Proof of other relevant past acts should be admissible as well. Lay witnesses or public records can provide this information; no experts are required.\footnote{196}

The possibility exists that the factfinder may erroneously seize upon certain features of previous behavior as indicative of dangerousness. The fact that a homicide is committed in a particularly vile manner does not necessarily mean that its perpetrator is more likely to commit a second violent act than a more fastidious murderer, yet the factfinder may be more willing to affix the dangerousness label on the

\footnote{196 It is important to consider how past acts may be proved. Both sentencing and criminal commitment require predicate acts: in the first instance, a conviction; in the second, a finding that the defendant committed a dangerous act that would have been criminal but for the defendant’s insanity. \textit{Cf. Mental Health Standards, supra} note 13, § 7-6.10 (requiring jury to find beyond a reasonable doubt that the defendant committed the conduct charged before it may consider a verdict of not guilty by reason of insanity). Any evidence presented at the trial to prove these acts should also be admissible at the dangerousness proceeding.

Proof of other past acts can come from a number of sources. Obviously, any witnesses, including mental health professionals, who have directly observed such acts should be allowed to testify. Furthermore, evidence of past acts that can be ascertained from regularly kept records (for example, trial transcripts, arrest records, hospital charts) or party admissions should be admissible. Both are well-known exceptions to the hearsay rule. \textit{See} C. McCormick, supra note 109, at 628-69, 717-34, 735-42. On the other hand, because of its low probative value the mere fact of an arrest should not be admissible. \textit{See supra} note 99 and accompanying text. In this regard, it should be noted that the Supreme Court has found that basing a sentence on prior uncounseled convictions is a violation of due process, at least in part because of their low probative value. \textit{See} United States v. Tucker, 404 U.S. 443 (1977).

Another long-recognized exception to the hearsay rule is reputation evidence when character is at issue. C. McCormick, supra note 109, § 324, at 749. At least one court has held that an opinion about a defendant’s dangerousness based on her reputation should be admissible in sentencing proceedings. Esquivel v. State, 595 S.W.2d 516, 528 (Tex. Crim. App.) (former district attorney’s opinion about defendant’s dangerousness held admissible), cert. denied, 449 U.S. 986 (1980). Because such opinion evidence is, or should be, based on specific acts, which are generally admissible, the opinion itself injects a superfluous and prejudicial element into the proceedings. \textit{See} Comment, Estelle v. Smith and Psychiatric Testimony: New Limits on Predicting Future Dangerousness, 33 Baylor L. Rev. 1015, 1031-32 (1981). On the other hand, testimony that the defendant is known by the community to have committed specific acts should generally be admissible. \textit{See} Fed. R. Evid. 405 advisory committee note (“Of the . . . methods of proving character provided by the rule, evidence of specific instances of conduct is the most convincing.”); \textit{see also} Baker v. United States, 388 F.2d 931, 934 (4th Cir. 1968) (defendant’s general conduct and behavior may be submitted in presentence report). The witness can always be cross-examined about her sources of information. Moreover, as McCormick states, “[T]he use of reputation [is permissible in those] situations in which an exception to the hearsay rule is demanded by necessity and justified by special assurances of reliability.” C. McCormick, supra note 109, § 324, at 749 (footnote omitted). In many cases, community knowledge about past acts may be the only evidence available about those acts, thereby meeting the necessity prong. This knowledge will also usually meet the reliability prong: “A high probability of reliability is provided by restricting the use of reputation to those subjects in regard to which persons with personal knowledge are likely to have disclosed facts which have been the subject of general inquiry; thus the community’s conclusion is likely to be accurate.” \textit{Id.}}
former individual. A long juvenile arrest record for purse snatching may overly impress a factfinder deciding whether to commit an individual found not guilty of aggravated assault by reason of insanity. But these risks are justifiable under most circumstances. A layperson's description of the act and its consequences, if subjected to cross-examination, will not be nearly as powerful as testimony by an unopposed mental health professional. The defense may challenge the veracity of reports concerning prior bad acts; it may also emphasize the small number of such acts, the length of time separating the act or acts from the present proceeding, the marginal relevance of a given act to the type of violence sought to be predicted, and the unique nature of this act, implying that it will not happen again. Finally, if the defense feels such an approach will not overcome the factfinder's tendency to find a one-time or multiple-time bad actor dangerous, it may use a clinician to counteract that impression. Of course, this move would permit the state to rebut the defense's expert testimony with its own expert testimony, a point leading to the next implementation issue.

2. What Types of Actions by the Defense Permit State Use of Clinical Predictions?

Only if the defendant relies on an expert clinical prediction of nondangerousness should the state be permitted to introduce its own clinical testimony. The defense should be able to present an expert actuarial prediction, either in its case in chief or as rebuttal of the state's actuarial prediction, without fear that the door will be opened to a more prejudicial type of prediction testimony by the state.

The defense may also decide to forego clinical prediction testimony as to dangerousness but still use clinical expertise on other issues. For instance, testimony by a mental health professional might be relevant to whether a person subjected to commitment is mentally disordered,\textsuperscript{197} whether a person being sentenced was suffering from mental stress at the time of the offense,\textsuperscript{198} or whether, in either commitment or sentenc-

\textsuperscript{197} See supra notes 11-12.

\textsuperscript{198} Sentencing courts will often take into account evidence of so-called diminished responsibility, not rising to the level of insanity but sufficient to mitigate punishment. See generally Arenella, The Diminished Capacity and Diminished Responsibility Defenses: Two Children of a Doomed Marriage, 77 COLUM. L. REV. 827 (1977). The Model Penal Code's capital sentencing statute provides that mitigating factors shall include whether the defendant's capacity to "appreciate the criminality . . . of his conduct or conform his conduct to the requirements of the law was significantly impaired," and whether she was suffering from extreme mental or emotional disturbance "at the time of offense," MODEL PENAL CODE § 210.6(4) (Official Draft 1980). Many states have adopted this provision in their capital sentencing statutes. Id. commentary, at 167-
Each of these situations requires some comment.

Using a mental health professional to present evidence about present mental state alone should not authorize state use of clinical prediction testimony. So long as the expert refrains from prognosis and focuses on the individual's current mental symptoms, the defense cannot be said to have relied upon clinical testimony to establish that the individual is not dangerous.

Testimony about mental state at some point in the past is more problematic. If offered in a commitment proceeding, it might be relevant both to dangerousness and to the presence of mental disorder. If offered at sentencing, it may also be relevant to two separate issues: dangerousness and the individual's relative culpability as measured by her mental state at the time of the offense. Since the content of testimony about past mental state may be the same regardless of the issue, the state might be prejudiced if it is barred from the use of clinical prediction evidence. The better approach, however, would be to try to limit all clinical testimony to the narrow issue of mental state at the time of the offense. Only if the court decides that the defense's expert ventures beyond that topic into a discussion of violence-inhibiting factors should the state's clinician be permitted to address the likelihood of recidivism.

The line-drawing is even more difficult when the issue is treatability. Both dangerousness and treatability assessments involve predictions; when the defense introduces clinical evidence based on the...
latter type of assessment, it is often suggesting that the individual either is not dangerous or will not be so for long, given proper treatment. Frequently, however, such testimony may be directed purely at the efficacy of specific therapeutic modalities in treating problems that are not related to past violent behavior (such as depression or vocational deficiencies). Again, the court would need to make a sensitive appraisal of the testimony's scope in order to determine whether the state should be able to use clinical prediction evidence.201

The same type of monitoring becomes necessary when the state uses a clinician to address issues other than dangerousness.

3. On What Issues May the State Unilaterally Use a Clinician?

In each of the three contexts at issue here the state may wish to rely upon clinical expertise to prove facts other than dangerousness. In particular, in criminal commitment proceedings the state may wish to prove the existence of mental abnormality,202 and in both the criminal commitment and sentencing contexts it may want to contest the defendant's treatability.203 The state's prerogatives here should mirror the defense's. The state should be able to use a clinician to describe present mental state but not past mental state or future behavior, unless the defense chooses to do so, or unless it can convince the court that its clinical testimony does not involve violence prediction but rather some

---

201 Presumably the defense, the court, and the prosecution will all have an incentive to limit the scope of the defense's expert testimony to its avowed objective. But because of the inevitable overlap between clinical issues, the defense's expert evidence on past mental state or treatability may occasionally lead the court to permit the state to respond with clinical prediction testimony. Of course, the defense's expert must testify first if the court is to make this decision sensibly. Additionally, the defense should give notice prior to the commitment or sentencing hearing when it is planning to use clinical testimony. The findings of any evaluation that the state commissions as a result of this notice would be admissible on those issues raised by the defense through clinical testimony.

These procedures track those currently followed in many jurisdictions in administering the insanity defense. The defendant is required to notify the prosecution of her intent to raise an insanity defense or other defense based on mental abnormality, see, e.g., Mo. Ann. Stat. § 552.030 (Vernon 1953 & Supp. 1983); Tex. Crim. Proc. Code art. 4.03, § 2 (Vernon 1979); Va. Code § 19.2-168 (1983), after which the prosecution may obtain its own evaluation and use the results to address any issue of mental condition raised by the defense. See, e.g., United States v. Greene, 497 F.2d 1068, 1072-73, 1082-84 (7th Cir. 1974) (admitting government psychiatric testimony to rebut defendant's claim of insanity during an airline hijacking), cert. denied, 420 U.S. 909 (1975); United States v. McCracken, 488 F.2d 406, 410-11 (5th Cir. 1974); State v. Whitlow, 45 N.J. 3, 210 A.2d 763 (1965). Indeed, as the summary to this part suggests, there are conceptual reasons for treating dangerousness testimony and insanity testimony similarly. See infra text accompanying notes 207-08.

202 See supra notes 11-12.

203 See supra note 199.
matter only tangentially related.\textsuperscript{204} Moreover, with respect to the treatability issue, the state should be permitted to present both hard actuarial data on the prognosis for given populations of patients\textsuperscript{205} and evidence of prior treatment successes or failures, analogous to what is permissible as actuarial proof of dangerousness.

D. Summary

Professor Bonnie and I have argued that a defendant accused of a crime should be permitted to introduce clinical testimony about her subjective state of mind, despite its speculative nature, whenever the law has made such testimony relevant.\textsuperscript{206} Qualified clinical experts can “enable defendants to explore and present subjective defenses and assist triers of fact to assess the plausibility and significance of such claims.”\textsuperscript{207} Similarly, clinical prediction testimony based on reasonable data-collection procedures and presented by knowledgeable clinicians who stay within the bounds of their expertise can be helpful both to the defendant seeking an individualized assessment of her violent propensities and to factfinders who must make the difficult decision about future dangerousness.

One difference between the reconstructive context and the contexts at issue here is the extent to which the law gives the defense control over introduction of such clinical testimony. The state has no need for expert opinion evidence on mental state at the time of the offense when the defendant does not plan a defense based on mental abnormality; thus, whether a battle of the experts takes place is entirely up to the defendant. But such is not the case in commitment and sentencing proceedings. The state has become increasingly dependent on mental health professionals for its proof of dangerousness in commitment proceedings and often calls upon them to address the issue in sentencing determinations as well, regardless of the defense’s willingness or ability to obtain clinical expertise.

\textsuperscript{204} For instance, in the criminal commitment context, expert testimony that the individual’s mental disorder can be effectively treated only in the institution may be admissible. Cf. Mental Health Standards, supra note 13, § 7-7.4(d) (“If the court is persuaded that acquittee will continue to receive the needed treatment or habilitation, it may order . . . that acquittee be released . . . .”); supra note 200.
\textsuperscript{205} Unfortunately, such data are scarce. But see Crane, Clinical Psychopharmacology in Its 20th Year, 181 Sci. 124, 125 (1973) (“60 to 70 percent of acute schizophrenics on no drugs are readmitted within 1 year, while only 20 to 30 percent receiving some form of drug therapy require rehospitalization within 1 year.”); see also sources cited in id.
\textsuperscript{206} See Bonnie & Slobogin, supra note 33.
\textsuperscript{207} Id. at 522.
Because clinical predictions are so speculative, this state of affairs should not be allowed to continue. Prohibiting the state from using expert clinical testimony on dangerousness does not prevent it from proving the issue; hard actuarial data and prior bad acts are relevant evidence that do not have the evidentiary deficiencies associated with clinical testimony. The implementation of a defendant-first approach would not be simple, but the judicial monitoring it requires is no more arduous than the decisions courts are often required to make regarding the scope of direct and rebuttal evidence. The alternative is to permit the state to use questionable prediction testimony in situations in which it is not challenged in kind, thereby prejudicing the defense and heightening the possibility of an erroneous determination.

The next part of this Article addresses the extent to which the scheme outlined above is required by the Constitution.

III. A CONSTITUTIONAL ANALYSIS OF DANGEROUSNESS PREDICTIONS

Until now this Article has avoided considering whether the rules of evidence used to analyze the admissibility of dangerousness predictions apply in commitment and sentencing proceedings. Some jurisdictions do require that the same evidentiary protections afforded in criminal and civil trials be extended to persons subjected to capital sentencing. A small number also explicitly require them in criminal

---

208 The most pertinent example of this judicial monitoring comes from the administration of the rule that is most analogous to the approach advocated here—the character evidence rule. See supra notes 185-87 and accompanying text. It has been held, for instance, that the defendant may “introduce only evidence of a ‘pertinent trait of his character’ and not . . . undifferentiated character evidence of the most general sort, such as testimony to the effect that the accused is of ‘good character’ or ‘good morals.’” D. Louisell & C. Mueller, supra note 185, § 137, at 90-91. Similarly, “evidence of traits which have no bearing upon the question whether defendant committed the crime charged may properly be excluded.” Id. at 92 (footnote omitted). As to the prosecution’s rebuttal, “the judge has at once considerable discretion and a heavy responsibility to control the process,” id. § 138, at 100, by making sure both cross-examination and rebuttal witness testimony are “limited by the nature of the good character evidence previously adduced.” Id. at 102. What makes this “workable even if clumsy system,” Michelson v. United States, 335 U.S. 469, 486 (1948), even more closely analogous to the approach advocated in the text is the fact that expert testimony on the character issue is admissible in many instances and is being used more frequently. See D. Louisell & C. Mueller, supra note 185, § 149, at 183-84. But see Bonnie & Slobogin, supra note 33, at 481-82 n.162.

209 According to Professor Dix, three states (including Idaho and Virginia, where dangerousness is an aggravating circumstance, see supra note 14) specify that the rules of evidence apply at capital sentencing, and six (including Washington, where dangerousness is an aggravating circumstance, see supra note 14) explicitly state that they do not. Three other states require the prosecution to abide by the rules of evidence in presenting evidence of aggravating circumstances, “but exempt evidence bearing on mit-
commitment proceedings.\textsuperscript{210} Few jurisdictions, if any, are as careful at noncapital sentencing proceedings as they are at trial about barring suspect evidence.\textsuperscript{211}

To the extent that the traditional rules of evidence are followed in a given context, I believe that the defendant-first approach described in the previous section should govern. I also believe that two grounds can be advanced for making this approach a constitutional requirement and thus not subject to variations in local evidence rules. The first constitutional basis is the due process clause; the second, the fifth amendment's privilege against self-incrimination. As will be seen, the due process analysis builds upon what has been discussed heretofore, while the fifth amendment analysis is entirely independent of it.

A. The Due Process Perspective

The petitioner in \textit{Barefoot v. Estelle}\textsuperscript{212} argued that the admission of psychiatric testimony concerning his dangerousness at his capital sentencing proceeding was unconstitutional. Because the case involved the death penalty, Barefoot framed his argument in eighth amendment as well as due process terms. But the core notion he advanced was derived from due process: because clinical predictions of dangerousness are so likely to be erroneous, yet still so likely to be relied upon by the trier of fact, any deprivation of liberty (or life) based on such a prediction is unwarranted.\textsuperscript{213} The Supreme Court rejected this stance by a six

\textsuperscript{210} See, e.g., VA. CODE § 19.2-181(3) (Supp. 1984) (commitment proceeding shall be deemed a "civil proceeding"); WASH. REV. CODE ANN. § 10.77.100 (1980) (experts subject to rules of evidence).


\textsuperscript{212} 103 S. Ct. 3383 (1983).

\textsuperscript{213} As the Court framed it:

[Petitioner urged, among other submissions, that the use of psychiatrists at the punishment hearing to make predictions about petitioner's future conduct was unconstitutional because psychiatrists, individually and as a class, are not competent to predict future dangerousness. Hence, their predictions are so likely to produce erroneous sentences that their use violated the Eighth and Fourteenth Amendments.
to three margin, stating, "We are not persuaded that such testimony is almost entirely unreliable and that the factfinder and the adversary system will not be competent to uncover, recognize, and take due account of its shortcomings."214

The Court has framed the issue correctly but come to the wrong conclusion. In the type of situation involved in Barefoot—where the psychiatric testimony for the state was challenged only by cross-examination—the factfinder cannot be counted upon to recognize the shortcomings of dangerousness testimony. The adversary system should not be relied upon when the state alone takes advantage of expert testimony of questionable accuracy.

In essence, the constitutional argument against admission of such testimony is the same as the evidentiary one: the probative value of unchallenged dangerousness testimony is outweighed by its potential for misleading the jury and prejudicing the defendant. The Court recognized the congruence between the evidentiary and constitutional analysis in Barefoot, not only in the statement cited above but also in the following passage explaining why the due process clause should not apply to the case:

[T]he rules of evidence generally extant at the federal and state levels anticipate that relevant, unprivileged evidence should be admitted and its weight left to the fact finder, who would have the benefit of cross examination and contrary evidence by the opposing party. Psychiatric testimony predicting dangerousness may be countered not only as erroneous in a particular case but as generally so unreliable that it should be ignored. If the jury may make up its mind about future dangerousness unaided by psychiatric testimony, jurors should not be barred from hearing the views of the State's psychiatrists along with opposing views of the defendant's doctors.215

It is important to note the first line's allusion to, and the last line's emphasis on, the presence of "opposing doctors," suggesting that when there are none the adversary system may not function adequately. Of course, the Court found no due process violation even though Barefoot did not present expert testimony. But after recognizing that "no evidence was offered by petitioner at trial to contradict the testimony" of the state's experts, the Court did state, "Nor is there a contention that,

---

214 Id. at 3397.
215 Id. (emphasis added) (footnote omitted).
DANGEROUSNESS AND EXPERTISE

Despite petitioner's claim of indigence, the court refused to provide an expert for petitioner.\textsuperscript{216} The Court then cited a Texas statute providing for payment of $500 for expenses incurred in procuring expert testimony.\textsuperscript{217} Can one infer from this language that had the state not provided the defendant with an opportunity to obtain expert assistance, a violation of due process would have occurred? Did the Court mean to imply that the defendant, by failing to find expert assistance, in effect waived any due process argument against the admission of expert dangerousness testimony by the state?

Such an interpretation of \textit{Barefoot} would not, of course, require the defendant-first rule. Under the waiver approach, the state would be prohibited from using clinical prediction testimony only when it had somehow prevented the defendant from using such experts. If the defendant were able to consult experts but chose not to rely on them, the state would still be able to use clinical predictions of dangerousness.

The \textit{Barefoot} majority opinion displays some sensitivity to the dangers of unopposed expert testimony; however, it does not carry this insight to its logical conclusion. For reasons suggested earlier,\textsuperscript{218} the fact that a nondangerous defendant has theoretical access to experts does not assure that one will come forward to testify to the defendant's nondangerousness. There is, of course, an initial question whether $500 or a like sum will enable the indigent to obtain meaningful consultation.\textsuperscript{219} More importantly, even if experts are consulted and decide that they cannot testify for the defense, the defendant is not therefore presumptively dangerous, nor should she lose the right to an unbiased determination of that issue. Yet such is the implicit assumption of the waiver approach. Despite the prejudicial impact of unopposed clinical dangerousness testimony, it would be admissible so long as the defendant has been given a \textit{chance} to produce expert rebuttal.

From \textit{Barefoot} and other Supreme Court decisions, there appear to be two concerns underlying the Court's reluctance to give explicit constitutional standing even to the defective waiver approach, much less the defendant-first model suggested in this Article. First, the \textit{Barefoot} Court seemed to fear that limiting the state's ability to use clinical predictions would make it difficult for the state to prove dangerousness in other contexts.\textsuperscript{220} Yet according to a majority of the Court in \textit{Jurek v.}

\begin{footnotes}
\item[216] \textit{Id.} at 3397 n.5.
\item[217] \textit{Id.} (citing Tex. Code Crim. Proc. Ann. art. 26.05, §1(d) (Supp. 1982)).
\item[218] \textit{See supra} text accompanying note 184.
\item[219] Assuming that money is available for an independent consultation, it is unlikely that the state would provide enough funds for more than one such evaluation. \textit{See supra} note 183.
\item[220] "Acceptance of petitioner's position that expert testimony about future danger-
\end{footnotes}
Texas, lay testimony alone can support a finding of dangerousness, and, as noted earlier, actuarial evidence is available in limited circumstances. Furthermore, the fact that evidence is material and that there are few alternatives to proving the facts at issue in a particular case does not render the evidence immune to due process limitations. The Court has held, for instance, that due process prohibits reliance on a coerced confession because "such a confession combines the persuasiveness of apparent conclusiveness with what judicial experience shows to be illusory and deceptive evidence." From this passage, it is clear that the probative value and prejudicial impact of a given piece of evidence must be considered in evaluating its admissibility under the Constitution. Unopposed clinical testimony that a person is dangerous can have the same type of illusory persuasiveness that the Court associates with a coerced confession.

A second reason why the Court may have avoided a due process ruling in Barefoot is its reluctance to use the due process clause to regulate state evidentiary law. In Spencer v. Texas, for instance, the Court upheld a conviction despite the defendant's argument that the state's introduction of a prior conviction during trial for the purpose of enhancing the defendant's sentence violated the due process clause. The defendant argued that even though the judge had instructed the jury to consider the prior conviction only after finding the defendant guilty, the jury could not have avoided considering the conviction in determining guilt or innocence. In response, the Court noted, "[I]t has never been thought that [decisions under the due process clause] establish this Court as a rule-making organ for the promulgation of state rules of criminal procedure."

This decision was recently reaffirmed in Marshall v. Lonberger, in which Justice Rehnquist, writing for the majority, stated that the due process clause "does not permit the federal courts to engage in a finely-tuned review of the wisdom of state evidentiary
DANGEROUSNESS AND EXPERTISE

Rehnquist then went on to say, however, that “the common law, like our decision in Spencer, implicitly recognized that any unfairness resulting from admitting prior convictions was more often than not balanced by its probative value and permitted the prosecution to introduce such evidence without demanding any particularly strong justification.”

The converse of this statement is that despite the Court’s unwillingness to promulgate evidentiary rules, the due process clause may require court regulation of certain types of evidence that do not have high probative value, particularly when other factors militate against admissibility. The Barefoot opinion itself expresses a willingness on the part of the Court to use the clause as a means of assessing the admissibility of evidence whose low reliability the adversary process and the factfinder are not equipped to discern.

For these reasons, Barefoot arrives at the wrong conclusion. Given the low probative value of expert clinical predictions of dangerousness and the heightened possibility of undue reliance by the factfinder on such testimony when it is unopposed, the due process clause should bar its admission unless the defendant chooses to rely upon clinical prediction testimony. Despite the Court’s inference to the contrary, the mere opportunity to obtain expert assistance or to make reference to current research about the general unreliability of dangerousness predictions should not weaken the due process claim, since neither of these devices significantly improves the adversary system’s ability to pinpoint erroneous testimony.

This conclusion is particularly appropriate in capital proceedings in which the death penalty is involved. But the obvious differences between capital sentencing on the one hand and commitment and noncapital sentencing on the other do not diminish the forcefulness of the due process argument in the latter contexts. The Supreme Court has repeatedly expressed concern that capital proceedings be particularly reliable, given the gravity of a finding adverse to the defendant. But in distinguishing between capital cases and noncapital cases the Court has never held or implied that a specific type of information too unreliable

---

227 Id. at 853 n.6.
228 Id.
229 “We are unconvinced, however, at least as of now, that the adversary process cannot be trusted to sort out the reliable from the unreliable evidence and opinion about future dangerousness, particularly when the convicted felon has the opportunity to present his own side of the case.” Barefoot, 103 S. Ct. at 3398 (emphasis added).
230 See, e.g., Woodson v. North Carolina, 428 U.S. 280, 305 (1976) (“[T]he penalty of death is qualitatively different from a sentence of imprisonment, however long. . . . Because of that qualitative difference, there is a corresponding difference in the need for reliability in the determination that death is the appropriate punishment in a specific case.”).
for capital sentencing decisions may nonetheless be used in noncapital cases. Rather, the Court has focused on the procedures for making the death penalty decision, requiring that they be particularly stringent and permit consideration of all information that the defendant wishes to present. If the admission of certain evidence in a capital case were found to violate due process because, to use White's words in Barefoot, "[t]he factfinder and the adversary system will not be competent to uncover, recognize, and take due account of its shortcomings," it is hard to see how the Court could sanction its admission in other types of proceedings, despite the lesser threat to the individual posed by those proceedings.

This conclusion is reinforced by two points. First, by virtue of the decisions that require heightened safeguards in capital proceedings, the adversary system is much less structured in the commitment and noncapital sentencing contexts and thus less likely to uncover evidentiary shortcomings. Second, the Barefoot Court itself recognized that a contrary holding might have implications in these areas; it noted that

---

231 Compare Gardner v. Florida, 430 U.S. 349 (1977) (declaring death sentence invalid because it was imposed by a judge who had considered information in the presentence report that the defense had not had the opportunity to challenge) with Hill v. United States, 368 U.S. 424 (1962) (fact that defendant was denied right to make a pre-sentence statement allowed by federal law did not require invalidation of felony sentence); Bullington v. Missouri, 451 U.S. 430 (1981) (double jeopardy bars death sentence after second conviction when first conviction resulted in life imprisonment, at least when first sentence was the result of a structured sentencing process) with Chaffin v. Stynchcombe, 412 U.S. 17 (1973) (jury should be given maximum discretion in considering length of noncapital sentence imposed after a second trial caused by defendant's appeal of first trial). See generally Woodson v. North Carolina, 428 U.S. 280 (1976):

While the prevailing practice of individualizing sentencing determinations generally reflects simply enlightened policy rather than a constitutional imperative, we believe that in capital cases the fundamental respect for humanity underlying the Eighth Amendment requires consideration of the character and record of the individual offender and the circumstances of the particular offense as a constitutionally indispensable part of the process of inflicting the penalty of death.

Id. at 304 (citations omitted). See also Note, The Impact of a Sliding-Scale Approach to Due Process on Capital Punishment Litigation, 30 SYRACUSE L. REV. 675 (1979) (discussing due process protections based on nature of penalty).

233 103 S. Ct. at 3397.

234 For instance, although the Court has not imposed stringent adversarial requirements at ordinary sentencing proceedings, see supra note 232, it has been quite willing to use the due process clause to invalidate noncapital sentences based on inaccurate information. See United States v. Tucker, 404 U.S. 443, 448 (1972) (due process forbids the use of prior uncounseled convictions for sentencing purposes because they may cause assumptions to be made that are materially untrue); Townsend v. Burke, 334 U.S. 736, 740-41 (1948) (due process was violated when the sentencing judge relied upon materially false information concerning defendant's prior record).

235 See supra notes 210-11.
acceptance of the petitioner's position "would immediately call into question those other contexts in which predictions of future behavior are constantly made." Of course, the Court's point was that a restrictive view of such predictions is insupportable because the consequences of such a view would reach far beyond capital sentencing. But implicit in this statement is the assumption that if the Court had recognized the applicability of the due process clause, its ruling would affect all clinical prediction testimony regardless of the type of proceeding in which it is offered. If one accepts the preceding arguments regarding the constitutional necessity of a defendant-first approach when dangerousness is the issue, distinguishing between capital sentencing and other contexts would be inappropriate.

The due process argument does not require the elimination of all false positive findings. The state's ability to introduce evidence of prior dangerous acts, lay testimony, and actuarial prediction when the defense does not use clinical prediction testimony may still result in a large number of nondangerous people being committed, sentenced for longer periods of time, or put to death as dangerous to others. Indeed, so long as dangerousness is a legal criterion, this unfortunate situation is a foregone conclusion, given the difficulty of predicting behavior with a low base rate. The due process concern is merely that in making this delicate and troublesome decision the factfinder should be presented with only the most reliable information in the least prejudicial way. With hard actuarial data, lay testimony, and information about prior dangerous acts, the probative value is high and there is relatively little danger of distracting the factfinder from the important factual considerations. With clinical predictions of dangerousness that are not challenged in kind, the opposite is true. In the first instance the adversary system has a good chance of exposing deficiencies in the evidence. In the latter case it does not.

103 S. Ct. at 3396.

I do not mean to gloss over the obvious normative differences between capital sentencing on the one hand and criminal commitment and ordinary sentencing on the other. A more relaxed approach to factfinding in the sentencing context can be justified on the ground that the state may impose any disposition within the statutory range. See supra note 36; see also STANDARDS FOR CRIMINAL JUSTICE, supra note 13, §18-6.4 commentary, at 450 (negative consequences of false positive and false negative findings come closer to being "in equipoise" in sentencing than at trial "since what is being distinguished is not innocence or guilt but rather degrees of culpability and dangerousness"). It can be argued less forcefully that given the act committed by the individual found not guilty by reason of insanity, the state is entitled to more leeway in its proof burden. Cf. Jones v. United States, 103 S. Ct. 3043, 3049-50 (1983) (suggesting that due process clause allows a state to place the burden on the defendant to disprove dangerousness). Despite these differences, the admissibility of information known to be highly inaccurate or prejudicial should not be countenanced in any judicial proceeding.
B. The Fifth Amendment Perspective

An entirely separate constitutional ground for following the defendant-first approach outlined in part II can be derived from the privilege against self-incrimination. As I have argued elsewhere, the privilege should prohibit clinical predictions of dangerousness in capital sentencing proceedings unless the defendant first introduces clinical testimony that she is not dangerous. To the extent that this rationale can be extended to noncapital sentencing and commitment, it would lend further constitutional support to the defendant-first approach.

The fifth amendment privilege has traditionally been thought to prohibit prosecutorial use at trial of self-incriminating statements by the defendant whenever those statements have been compelled by the state. In Estelle v. Smith the Supreme Court extended the coverage of the privilege to capital sentencing proceedings, rejecting the state’s argument that the fifth amendment bar to admission of compelled disclosures should apply only at trial. In doing so it quoted a passage from its 1967 decision in In re Gault: 

"[T]he availability of the privilege does not turn upon the type of proceeding in which its protection is invoked, but upon the nature of the statement or admission and the exposure which it invites." Because a capital sentencing proceeding exposes a defendant to the "ultimate penalty of death," the Smith Court found "no basis to distinguish between the guilt and penalty phases of respondent’s capital murder trial so far as the protection of the Fifth Amendment privilege is concerned." In effect, then, the Court now considers any disclosures by the defendant that form the basis for dangerousness testimony at capital sentencing to be "incriminating" and thus inadmissible if "compelled" by the state.

The question then becomes: when does the state "compel" such disclosures? In Smith the Court held that because the defendant, who "neither initiate[d] a psychiatric evaluation nor attempt[ed] to introduce any psychiatric evidence," was not warned that the results of his com-

---

238 See, e.g., Schmerber v. California, 384 U.S. 757, 761 (1966) (the privilege against self-incrimination protects the accused “from being compelled to testify against himself, or otherwise provide the State with evidence of a testimonial or communicative nature”) (footnote omitted). See generally C. Whitebread, Criminal Procedure: An Analysis of Constitutional Cases and Concepts 256-80 (1980).
240 387 U.S. 1 (1967).
241 Smith, 451 U.S. at 462 (quoting In re Gault, 387 U.S. 1, 49 (1967)).
242 Id. at 462-63 (footnote omitted).
243 See Slobogin, supra note 237, at 83.
petency evaluation would also be used on the issue of dangerousness at his capital sentencing proceeding, the testimony based on those results was inadmissible.\textsuperscript{244} If, as is likely, warnings to the defendant (coupled with notice to her attorney, which \textit{Smith} also required)\textsuperscript{245} lead the defendant to decline an examination, no penalty may attach.\textsuperscript{246} The Court also stated, however, that when a defendant has indicated a desire to introduce clinical testimony at the capital sentencing proceeding, the state may use “the same type of evidence in seeking to establish a defendant’s propensity to commit other violent acts.”\textsuperscript{247} It made approving reference to that part of the lower federal court’s opinion in \textit{Smith} which “left open ‘the possibility that a defendant who wishes to use psychiatric evidence in his own behalf [on the issue of future dangerousness] can be precluded from using it unless he is [also] willing to be examined by a psychiatrist nominated by the state.’”\textsuperscript{248}

In \textit{Smith}, then, one finds the same type of defendant-first notion as described in part II of this Article, but based on fifth amendment rather than evidentiary principles. If the defense does not use a mental health professional, the fifth amendment protects against state use of clinical testimony based on an evaluation of the defendant. Once the defendant indicates a desire to use clinical testimony, however, the state is no longer prohibited by the Constitution from demanding an evaluation of the defendant and relying on the same type of testimony.

Like the preceding evidentiary analysis, the \textit{Smith} approach would permit use of hard actuarial data, lay testimony, and proof of prior bad acts regardless of the defendant’s decision with respect to clinical testimony. None of these methods of proving dangerousness involves disclosures from the defendant (at most, these methods require only the type

\textsuperscript{244} \textit{Smith}, 451 U.S. at 468.

\textsuperscript{246} \textit{Id.} at 471. The Court held that a state-compelled evaluation is a “critical stage.” \textit{Id.} at 470. Yet instead of finding that the defendant had the right to have counsel present during this stage, as it had in other cases, see, e.g., Coleman v. Alabama, 399 U.S. 1 (1970) (counsel required at preliminary hearing); \textit{Mempa v. Rhay}, 389 U.S. 128 (1967) (sixth amendment requires that counsel be afforded to a felony defendant at a post-trial proceeding for revocation of probation and imposition of deferred sentencing); United States v. \textit{Wade}, 388 U.S. 218 (1967) (sixth amendment requires right to counsel at post-indictment, pretrial lineup), the Court merely required notice of the evaluation, at least in part because of its fear that counsel would disrupt the clinician-defendant relationship. \textit{See Smith}, 451 U.S. at 470 n.14.

\textsuperscript{246} “In such circumstances, . . . the State must make its case on future dangerousness in some other way.” \textit{Smith}, 451 U.S. at 468-69. I have argued that even if notice to the attorney and warnings are given, any subsequent disclosures should not be admissible unless and until the defendant raises the dangerousness issue through clinical testimony. \textit{Slobogin, supra} note 237, at 111-13.

\textsuperscript{247} \textit{Smith}, 451 U.S. at 472-73.

\textsuperscript{248} \textit{Id.} at 466 n.10 (quoting \textit{Smith v. Estelle}, 602 F.2d 694, 705 (5th Cir. 1979)) (Court’s interpolation).
of disclosures that do not implicate the fifth amendment). Nor, for the same reason, would clinical testimony based on hypothetical questions be foreclosed under the fifth amendment, although it might be inadmissible for evidentiary reasons discussed earlier.

The Court has shown marked reluctance to apply the fifth amendment to proceedings other than criminal trials and capital sentencing, however. It has studiously avoided opportunities to hold that the privilege applies in noncapital sentencing proceedings. And in French v. Blackburn it summarily affirmed a district court's holding that to apply the privilege in civil commitment proceedings would "destroy the valid purposes which they serve as it would make them unworkable and ineffective." Given the Court's recently demonstrated willingness to accord those subjected to criminal commitment even less procedural protection than those subjected to civil commitment, it is likely that the Court would have little trouble applying the Blackburn ruling to criminal commitment proceedings as well.

In light of these decisions, the possibility that the Court will extend the Smith holding beyond its present narrow confines is slim. The strongest case for doing so can be made in the context of "special track" sentencing when the state attempts to use an offender's statements to enhance her penalty beyond that normally prescribed for individuals

---

249 The fifth amendment protects only against the use of compelled disclosures that are "testimonial or communicative." Schmerber v. California, 384 U.S. 757, 761 (1966). "Real" evidence, or characteristics that by their very nature are exposed to the public, are not protected by the privilege. See, e.g., Gilbert v. California, 388 U.S. 263, 266-67 (1967) (writing exemplar exempted from fifth amendment coverage); United States v. Wade, 388 U.S. 218, 222-23 (1967) (physical appearance at line-up exempted); Holt v. United States, 218 U.S. 245, 252-53 (1910) (articles of clothing exempted). Demographic characteristics (for example, age, sex, race) and other public records items relied upon by hard actuarial devices (for example, prior convictions, arrests, or institutionalizations) would fall in the latter category.

250 See supra note 140 and accompanying text.

251 The Supreme Court has been confronted only twice with cases that raised the issue, and it decided both on other grounds. See Roberts v. United States, 445 U.S. 552, 558-59 (1980) (fifth amendment claim available on appeal when not raised in earlier sentencing proceeding); McNeil v. Director, Patuxent Inst., 407 U.S. 245, 250 (1972) (due process finding made decision about self-incrimination issue unnecessary).


254 Compare Jones v. United States, 103 S. Ct. 3043, 3048-51 (1983) (upholding automatic commitment of insanity acquittee based on presumption of mental illness, even though proof of insanity at trial was by a preponderance of the evidence) with Addington v. Texas, 441 U.S. 418, 425-33 (1979) (requiring state to prove by clear and convincing evidence the predicates for civil commitment).
convicted of the same offense. Under so-called sex psychopath legislation, for instance, clinical prediction testimony is often introduced by the state to support the designation of a multiple sex offender as dangerous and thus eligible for indeterminate confinement.\footnote{255} When such testimony is based on an evaluation of the offender, her disclosures are being used to impose what is in effect a second penalty.\footnote{256} Arguably therefore, the accusatorial model should apply;\footnote{257} the state should be prohibited from compelling such disclosures to support its attempt to impose the extra punishment.

Less forceful arguments can be made that the fifth amendment and its defendant-first corollary should be applied in regular sentencing and commitment proceedings. The Smith Court based its holding on In re Gault, which found that the privilege applied in juvenile delinquency adjudications.\footnote{258} The "exposure" invited by disclosures used to increase sentences within the statutory maximums or commit an insanity acquittee to a mental hospital is arguably no less harmful than that risked by a juvenile's incriminating statements. But in both regular sentencing and criminal commitment the state would be using the individual's disclosures for the purpose of imposing confinement that is already theoretically justified by the fact of conviction or acquittal by reason of insanity.\footnote{259} In delinquency proceedings, on the other hand, the state has yet to prove any ground upon which it may deprive the juvenile of liberty.

In those contexts in which the fifth amendment does apply, the privilege would provide further constitutional support for the defen-

\footnote{255} See Group for the Advancement of Psychiatry, Psychiatry and Sex Psychopath Legislation: The 30s to the 80s, 842-60 (1977), for a background discussion of these statutes.

\footnote{256} In Specht v. Patterson, 386 U.S. 605 (1967), the Supreme Court imposed several procedural protections, beyond those normally accorded defendants at sentencing, on the process by which defendants are sentenced under Colorado's sexual psychopath statute. Justice Douglas's majority opinion justified the holding on the grounds that deciding whether an offender was mentally ill and a habitual offender under that statute raised a distinct issue involving "the making of a new charge leading to criminal punishment." Id. at 610. The Court did not, however, consider whether the fifth amendment's protection against self-incrimination should be one of the rights accorded a defendant in such a situation.

\footnote{257} The accusatorial model is to be distinguished from the inquisitorial model, which permits the state to rely heavily on the defendant as a source of evidence. See generally Goldstein, Reflections on Two Models: Inquisitorial Themes in American Criminal Procedure, 26 STAN. L. REV. 1009, 1018 (1974) (stating that in the inquisitorial system "the accused [is] the primary source of evidence . . . . He is ordinarily called as the first witness and is questioned closely by the presiding judge about the facts of his life and his knowledge of the crime. Few rules of evidence inhibit the judge . . . .")

\footnote{258} In re Gault, 387 U.S. 1, 42-57 (1967).

\footnote{259} See supra note 236.
dant-first rule. Implementing Smith's approach would require procedures identical to those encountered in dealing with evidentiary considerations. Designating the types of evidence that the state may use to prove dangerousness, the actions on the part of the defense that constitute a decision to use clinical prediction testimony, the method of giving the state notice of such a decision, and the issues that the state may use a clinician to address without running afoul of the defendant-first notion involve the same calculus discussed in part II.

IV. THE DEFENDANT-FIRST APPROACH AND CIVIL COMMITMENT

Civil commitment is treated separately in this Article because its emergency nature presents practical problems not encountered in the sentencing and criminal commitment contexts and because the nature of the dangerousness inquiry that it requires is fundamentally different from the prediction process discussed in the preceding pages. Given these differences, the analytical framework developed in part II and the first section of part III is not applicable, at least at the initial intervention phase of commitment.

This conclusion is not based on normative concerns. One might argue that regardless of what due process may require in those legal proceedings where punishment or long-term incapacitation is the goal, the avowed aim of the civil commitment process is treatment and short-term incapacitation; therefore, it should not be encumbered with complicated evidentiary procedures. But the Supreme Court itself has recognized that the consequence of civil commitment is a "significant deprivation of liberty that requires due process protection."260 Aware of the coercion and stigma associated with involuntary hospitalization, several courts have imposed the adversarial model, including strict evidentiary rules, on the once informally conducted civil commitment process.261 If the defendant-first approach is deemed inappropriate in the

261 See, e.g., Lessard v. Schmidt, 349 F. Supp. 1078, 1102-03 (E.D. Wis. 1972) (rules regarding admission and exclusion of hearsay evidence), vacated, 414 U.S. 473 (1974); Holm v. State, 404 P.2d 740, 743 (Wyo. 1965) (statute providing that court "shall not be bound by the rules of evidence" held unconstitutional); State ex rel. Hawks v. Lazaro, 157 W. Va. 417, 440-41, 202 S.E. 2d 109, 125 (1974) (notice and personal confrontation of witnesses); see also Shuman, The Road to Bedlam: Evidentiary Guideposts in Civil Commitment Proceedings, 55 NOTRE DAME LAW. 53, 53-54 n.6, 77-78 nn.197-200 (1979-80) ("Those courts which have addressed the evidentiary requirements compelled by the due process clause in the context of a civil commitment hearing have required the use of evidentiary rules applicable in other judicial proceedings.").

A few courts have even held that the fifth amendment's privilege against self-incrimination should apply to the civil commitment process. See, e.g., Tyars v. Finner,
civil commitment context, the rationale cannot be that those subjected to it are entitled to fewer safeguards against the use of highly inaccurate evidence than are those who are sentenced or criminally committed.

There are two reasons, however, why the defendant-first approach is inappropriate in the emergency commitment context. First, it simply cannot be implemented effectively. A mentally ill person who has just threatened to kill her spouse or take a sledgehammer to a neighbor's car should not be allowed to go free while actuarial data are collected and an attorney, assuming the person has one, decides whether to obtain a clinical evaluation for her client. Such individuals are often brought to a mental health professional who, using her best clinical judgment, must decide immediately whether to hospitalize them, against their will if necessary. Unrebutted clinical predictions of dangerousness cannot be avoided in such situations given the practical exigencies.

Nor is it likely that such predictions can be dispensed with at the initial adjudicative hearing, if that proceeding takes place, as it does in most states, within forty-eight to seventy-two hours of the precipitating crisis. Information material to nonclinical prediction (for example, actuarial data, specific prior bad acts) will often be difficult to obtain in such a brief time, and a reasonable determination whether the individual should present clinical prediction testimony would be practically impossible.

518 F. Supp. 502, 509-10 (C.D. Cal. 1981) (in proceeding to determine whether subject is mentally retarded response to questions that may reveal subject's mental condition cannot be compelled), rev'd, 709 F.2d 1274 (9th Cir. 1983); Lessard, 349 F. Supp. at 1100-02 ("Statements made to a psychiatrist by the subject of a commitment proceeding, unless voluntarily given after notice of the possible consequences, cannot be the basis for an order of commitment."). But see French v. Blackburn, 428 F. Supp. 1351 (M.D.N.C. 1977), aff'd mem., 443 U.S. 901 (1979). Probably the biggest objection to decisions like Lessard is that, if the privilege is taken seriously, it might indeed render the commitment process "unworkable and ineffective." Blackburn, 428 F. Supp. at 1359. Dangerousness can be "proved" without talking to the individual, but mental illness, incompetence, or treatability probably cannot be. And even if this were not so, one could argue that the exposure that an individual invites by talking to a clinician in the commitment context is not comparable to that associated with sentencing and criminal commitment, given its therapeutic as well as incapacitative rationale. See supra notes 37-46 and accompanying text. On the other hand, the juvenile system at issue in In re Gault is theoretically founded on the same rehabilitative notions as civil commitment, at least in the traditional view. See In re Gault, 387 U.S. at 14-17; P. Lou, JUVENILE COURTS IN THE UNITED STATES 1-2 (1927). Moreover, unlike individuals involved in sentencing and criminal commitment proceedings, and like the alleged delinquent in In re Gault, an individual subjected to civil commitment has yet to be adjudicated eligible for any state intervention. In re Gault may thus be of stronger precedential value here than in most other contexts.

502 See, e.g., VA. CODE §§ 37.1-67.3 (1983) (hearing within 48 to 72 hours of detention).
Of course, problems with alternative methods of proving or disproving dangerousness do not dictate acceptance of clinical prediction testimony unopposed by defense experts. Rather, one might argue that the proper solution is to bar such testimony and require reliance on other types of evidence, however flawed, as the lesser of two evils. If clinical prediction of imminent dangerousness were as suspect as predictions of dangerous behavior at any time in the foreseeable future, this exclusionary policy would have much to recommend it. But it is more likely that the type of clinical dangerousness prediction called for in emergency situations is considerably more accurate than the long-term predictions that were the subject of parts I, II, and III. Professor Monahan has summarized the theoretical grounds for this assertion as follows:

In emergency commitment, . . . there is a small situational and temporal "gap" between the behavior used as a predictor and the outcome that is being predicted. One is directly sampling actions, e.g., threatening words and gestures, that are "as similar as possible to the behavior used on criterion measures," e.g., fulfilled threats. In violence as in other areas, it is potentially true that "predictions about individual behavior can be generated accurately from knowledge of the environments in which the behavior occurs." 2

If in fact clinical predictions of imminent dangerousness based on recent behavior in the community are relatively accurate, the rationale for the defendant-first rule disappears. 3

Both the practical and evidentiary arguments against the defendant-first approach begin to lose their persuasiveness, however, as one moves out of the emergency detention context. If, for instance, a commitment proceeding takes place two or more weeks after the initial in-

263 J. Monahan, supra note 28, at 59 (quoting W. Mischel, Personality and Assessment 168 (1968)).

264 The lone study on psychiatrists' ability to predict imminent dangerousness obtained an unimpressive false positive rate of 59%. Rofman, Askinazi & Fant, The Prediction of Dangerous Behavior in Emergency Civil Commitment, 137 Am. J. Psychiatry 1061, 1063 (1980). As the authors point out, however, those predicted to be dangerous were immediately medicated. Thus, "the probability of the patients in [the] experimental group (who would be unmedicated outside the hospital) committing assaults in the community would have far exceeded 41% without emergency commitment." Id. Moreover, this false positive rate is well above that obtained by the New York Study, see Cecozza & Steadman, supra note 7, at 1098 (86%), which suffered from the same methodological problem in that the individuals diagnosed as dangerous were usually immediately hospitalized and treated. See supra note 72 and accompanying text.
tervention (as provided for in several state statutes), there will probably be time for the defendant to gather the appropriate nonclinical information and make a decision regarding the presentation of clinical testimony. More importantly, the accuracy of any clinical prediction of dangerousness will decrease as the "situational and temporal gap" between the precipitating behavior and the outcome that is being predicted (that is, violence in the community) increases; prejudice concerns may again become paramount. For these reasons, a strong argument can be made that any determination of dangerousness made after the initial emergency period should be handled in the same manner as like determinations in criminal commitment and sentencing.

CONCLUSION

If it has accomplished nothing else, this Article should have highlighted the complexities associated with predicting and "proving" future behavior. It may be that abolishing dangerousness as a legal criterion would be the least costly approach to the problem.

But to date the law has persisted in its reliance on violence-proneness as a commitment and sentencing standard. It has also continued to depend upon testimony from mental health professionals as the primary source of information on that issue, despite its widely acknowledged potential for inaccuracy. The assumption seems to be that the factfinder considering this testimony will be able to parse the reliable evidence from the unreliable while remaining unmoved by the trappings of expertise, even when, as is often the case, cross-examination is its sole aid in that task. Unfortunately, such an optimistic appraisal of the adversary process does not comport with reality.

See, e.g., ILL. ANN. STAT. ch. 91 ½, § 7-2 (Smith-Hurd 1966) (10 days); TEX. REV. CIV. STAT. ANN. art. 5547-33 (Vernon 1958) (14 days).

Of course, dangerous behavior may occur after the initial emergency detention, thereby reducing the temporal gap. But the situational gap remains, because now the observed behavior has occurred in an environment (a hospital) different from the outside environment (the community). It may be that the accuracy of the clinical prediction in this situation would not be significantly reduced or that, even if it were, the lay factfinder would be likely to find the individual dangerous in any event. But alternatives to unopposed clinical testimony exist at this point; why risk the possibly misleading impact of such testimony?

A second issue is whether unopposed testimony that the individual is treatable (say, with antipsychotic medication) is so confounded with the dangerousness issue that it too must be excluded. Since the state's expert will have had two or more weeks to observe the individual's response to medication, such testimony can be based in large part on specific past behavior, which is admissible. To the extent prognosis is required, if it focuses on the ability of the medication to ameliorate the individual's mental condition as opposed to her "dangerousness," it should probably be admissible, although perhaps only if it is based on actuarial data. See supra note 205.
At the same time, the temptation to impose a ban on all clinical prediction testimony should be avoided. As I have tried to demonstrate, clinical evidence suggesting that someone is dangerous can be helpful and not unduly misleading to the factfinder, provided that it is not the sole clinical evidence that the factfinder considers.

The defendant-first approach advocated in this Article is more difficult to implement than either the current policy admitting any proffered expert testimony or the exclusionary reform advanced by many commentators. It requires some mechanism for apprising the state when the defense intends to use clinical prediction testimony. When no such intent is registered, it demands that any other clinical testimony, whether offered by the state or the defense, be carefully monitored to insure that the dangerousness issue is not raised; it may require revamping other procedures as well. But the defendant-first approach also presents the factfinder with the most reliable, most relevant, and least prejudicial information on the dangerousness issue: hard actuarial data and proof of prior bad acts. At the same time, it does not foreclose the defense from presenting clinically obtained and combined information on the dangerousness issue. Moreover, since the defense may frequently elect not to use clinical prediction testimony, it should force the state to generate alternative sources of information on dangerousness; in particular, it should improve the art of prediction by providing an incentive to develop hard actuarial data. Finally, the defendant-first approach conforms more closely than either wholesale admission or exclusion with due process notions of fairness and fifth amendment self-incrimination jurisprudence.

Most significantly, the aforementioned need to have the defense’s expert testify first so as to permit the judge to gauge the appropriate scope of the prosecution’s rebuttal may necessitate changes in typical practice. See supra note 201.