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ARTICLES

PREDICTIONS OF DANGEROUSNESS: ETHICAL CONCERNS AND PROPOSED LIMITS

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The preemptive strike—capturing the criminal before the crime—has great attraction, and efforts at such anticipatory interventions are growing throughout the criminal law. Policies of selective law enforcement, selective prosecution, and selective incapacitation are being developed by police, prosecutors, legislatures and parole boards, but practice outstrips both empirical validation and theoretical justification.

Along with the obvious scientific and legal problems raised by these preemptive strikes are substantial moral concerns: to what extent should predictions of future behavior limit current liberty? The threat to individual autonomy raised by the reliance on group behavior to control the individual is substantial, and possible racial, ethnic, and class bias is more than a specter. Any suggested use of predictions must respond to all of these concerns.

In the face of doubts about the accuracy, efficacy, and morality of predictions of dangerousness, one suggested response has been to reject, root and branch, reliance on such predictions as a ground for any interference with individual liberty. But that is an impossible position to maintain. Predictions of dangerousness play an important role in decision making throughout the criminal justice system. First, implicit predictions of future behavior are made at every point in the criminal justice system where physical danger to the person is threatened. Second, explicit predictions of such behavior have been part of the criminal law for centuries; current use is extensive and includes prosecutorial decisions, bail and pretrial detention, and sentencing schemes at local, state, and

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federal levels. Wilson has noted that "[t]he entire criminal justice system is shot through at every stage (bail, probation, sentencing, and parole) with efforts at prediction, and necessarily so; if we did not try to predict, we would release on bail or on probation either many more or many fewer persons, and make some sentences either much longer or much shorter."[1]

The explicit use of predictions has been widely recognized and utilized by criminal justice authorities as well as by the courts.[2] All current members of the United States Supreme Court have expressed their agreement with Justice Stevens' statement in *Jurek v. Texas* that "any sentencing authority must predict a convicted person's probable future conduct when it engages in the process of determining what punishment to impose."[3] The Court recently considered explicit use of predictions in one case involving the Texas death penalty statute[4] and in another case involving the continued detention of an individual who had pled not guilty by reason of insanity after the expiration of the time for which he could

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1. J. WILSON, CRIME AND PUBLIC POLICY 279 (1983).

2. Federal and state cases have recognized the necessity for the use of predictions in particular situations. United States v. Glover, 725 F.2d 120 (D.C. Cir. 1984), *cert. denied*, 104 S. Ct. 1682 (1986) (police decision to arrest); Toussaint v. Yockey, 722 F.2d 1490 (9th Cir. 1984) (prison movement); Wyler v. United States, 725 F.2d 156 (2d Cir. 1983) (police search); United States v. Cox, 719 F.2d 285 (8th Cir. 1983), *cert. denied*, 104 S. Ct. 1714 (1986) (bail and sentencing); United States v. Davis, 710 F.2d 104, 107 (3d Cir.), *cert. denied*, 464 U.S. 1001 (1983) ("district judges routinely determine whether a defendant is dangerous for the purposes of regular sentencing and setting bail"); Inmates of B-Block v. Jeffes, 79 Pa. Commw. 275, 470 A.2d 176 (1983), *aff'd*, 504 Pa. 509, 475 A.2d 743 (1984) (per curiam) (prison control); Illinois v. Carmack, 103 Ill. App. 3d 1027, 432 N.E.2d 282 (1982), *cert. denied*, 459 U.S. 875 (1982) (police action); Gammage v. State, 630 S.W.2d 309 (Tex. App. 1982) (constitutionality of manacling defendant during trial). Predictions of dangerousness play a central role in the Model Penal Code's (MPC's) provision on attempt, focusing on the dangerousness of the actor and not the dangerousness of his conduct. MODEL PENAL CODE § 5.01 (Official Draft 1962). The MPC's attempt provision has been adopted by some of the circuits. *See, e.g.*, United States v. Mandujano, 499 F.2d 370 (5th Cir. 1974), *cert. denied*, 419 U.S. 1114 (1975). The Harvard Dangerous Offender Project presents many examples showing the pervasive role of predictions of dangerousness throughout the criminal law. *See* M. MOORE, S. ESTRICH, D. MCGILLIS & W. SPELMAN, DEALING WITH DANGEROUS OFFENDERS (1983).

3. 428 U.S. 262, 275 (1976).

4. In Barefoot v. Estelle, 463 U.S. 880 (1983), the Court was faced with the constitutionality of the Texas death penalty statute which, in effect, allows a finding of future dangerousness to justify a capital sentence.

have been held if convicted of the crime.[5] Finally, predictions of dangerousness also underlie the civil commitment of those mentally ill or retarded persons who are thought likely to be a danger to themselves or others.

Therefore, a jurisprudence that pretends to exclude the role of predictions of dangerousness is self-deceptive. The fact that such predictions are made and relied on, and cannot be banished from the criminal law, is one reason for acknowledging them, studying them, and trying to improve their accuracy. But the justification is larger than this response to the inevitable. We must develop a jurisprudence of predictions if we are, with appreciation of our modest store of knowledge of human behavior, justly to allocate the properly limited punitive powers under the criminal law. A merciful and just system of punishment presupposes leniency toward those who least threaten social injury; and this inexorably involves predictions of dangerousness.

The proper question, therefore, is not whether predictions should be used, but where and how they should be used. These questions have not been squarely faced by lawyers, politicians, and others concerned with the ethics of social policy. Yet determinations about the proper use of predictions are, in the end, not a statistical or scientific matter, but a political and social judgment about what risks are unacceptable, and what responses to risks should be allowed.

Many values other than the hope of preventing future injuries determine criminal sanctions; a theory of criminal justice is vastly broader than a theory of crime prevention by controlling those who threaten criminal injuries. But predictions of dangerousness are one basis on which punishment resources are in fact allocated, and if we are to be guided by that consideration in justly differentiating among individuals, the relevant principles for such differentiation must be enunciated. Our effort is to define the proper and modest use of a concept necessary to the operation of the criminal law.

We propose to get the dragon out onto the plain. We do not focus on how well dangerousness can be predicted. We assume that present predictive capacities will prove to be the

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5. Jones v. United States, 463 U.S. 354 (1983), presented the question of the constitutionality of committing on grounds of future dangerousness one who had pleaded not guilty by reason of insanity to a term that might continue beyond the possible sentence for which he could have been held as a prisoner or for which he could have been held as a patient on grounds applicable to civil commitment.

best we have for several decades. Suppose that, even among those with a high risk of committing a future crime of violence, to be sure of preventing one such crime, we would have to detain three of those at risk. We submit that it is still ethically appropriate and socially desirable to take such predictions into account in many police, prosecutorial, judicial, correctional, and legislative decisions.

Lest we be mistaken for advocates of an extension of preemptive sentencing, let us mention some of the limiting principles we shall develop in this essay.[6] We argue that punishment should not be extended or imposed on the basis of predictions of dangerousness beyond what would be justified independent of that prediction. Thus the concept of "desert" defines the upper and lower limits of allowable punishment.[7] Within these limits, however, we believe that predictions of dangerousness should influence sentencing and punishment decisions, broadly defined, based on the balancing principles developed in this essay. These are explicit restrictive principles. A proper role for predictive sentencing should result in the reduction of the present, pervasive reliance on implicit predictions, which are often based on erroneous assumptions and expectations.

In the first part of this essay, we deal with definitions, limit the scope of our inquiry, and suggest some present and likely future applications of predictions of dangerousness. In the second part, we discuss the limits of present capacities to predict dangerousness. The third part examines common conceptual problems regarding prediction of violent behavior, in particular issues dealing with justice to the individual. That part also discusses risk shifting between individuals and society, and responds to the concern about racial bias in predictions. In the fourth part, we review the development of judicial doctrines of dangerousness and strike at what we see as the fundamental imprecision in the present judicial consideration of this concept. The fifth part presents our general theory of the appropriate use of predictions of dangerousness.

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6. Without limits, some possible uses of predictions of dangerousness indeed have an *Alice in Wonderland* quality to them—punishment first, trial later.

7. There may be additional considerations in setting the corresponding lower limits of just punishment.

I. PREDICTIONS OF DANGEROUSNESS

There is nothing alien about using predictions of the future behavior of others to guide our conduct; it is hard to imagine life without such assumptions of both the continuities and discontinuities of the behavior of others and without reliance on such assumptions. It would certainly be difficult to cross a city street; driving a car would be unthinkable.

In this essay, we concentrate on the use of explicit predictions of dangerousness, whether spelled out in statutes or articulated by judges in decisions, but we stress the pervasive importance of the implicit predictions that we are *not* discussing. They play a fundamental role in the operation of the criminal law, even though they may never be articulated or even recognized as such by those relying on them.

There is a lengthy history of reliance on explicit predictions of dangerousness, dating at least from the sixteenth century, and of applying express predictions of dangerousness as a ground for invocation of criminal sanctions. Here is a brief catalog:

1. With the enclosures of the commons and the Elizabethan Poor Laws came the Vagrancy Acts, providing sanctions against sturdy rogues and vagabonds, those wandering abroad without lawful or visible means of support, those loitering with intent, and those falling within similar arcane phraseology which still underpins the disorderly conduct statutes, regulations, and ordinances of many states, cities, and counties in the United States. These sanctions are plainly preemptive strikes against those seen as likely to be disturbing, disruptive, or dangerous. Included in this group would be "suspicious persons" ordinances, "stop and frisk," and public drunkenness laws.

2. Habitual Offender Laws and "third-time loser" laws all have a long and checkered history in England and this country. Their quality of being based in part on predictions of future criminal acts was most manifest in what was called the "dual track" system of punishment in some European habitual-criminal statutes that had their analogues in this country. For many years, under English habitual-criminal legislation, when the habitual criminal had finished the term of imprisonment for his last offense, he would then be held as a habitual criminal; the conditions of his detention were ameliorated and more recreational facilities and comforts extended to him, since he was now not being "punished" but rather detained because of his high likelihood of future

criminality.

3. For persistent but less serious habitual offenders—unredeemable nuisances rather than serious threats—many states devised and applied Habitual Petty Offender Laws, jurisprudentially akin to the previous category.

4. Sexual Psychopath Laws are perhaps the best known example of sentences statutorily based on predictions of dangerousness. They disgraced our jurisprudence, grossly misapplying what little knowledge we have about the sexual offender, achieving injustice without social protection.

5. Special Dangerous Offender statutes were recommended by the American Law Institute in its Model Penal Code[8] and have found diverse ways into the statute books of most states.[9] Such statutes often rely expressly on the alleged capacity of psychologists to assist juries or the sentencing judge in predicting the greater future dangerousness of certain categories of offenders and therefore the propriety of imposing increased sanctions on them. Federal Special Dangerous Offender statutory provisions were enacted to limit unprincipled Sexual Psychopath statutes.[10]

6. Sentencing generally: Setting aside those situations where the legislature has provided a mandatory sentence without allowing the sentencing judge discretion in its imposition, it is clear that predictions of dangerousness influence a wide swath of criminal sanctions. The judge's view of the gravity of the harm, the seriousness of the criminal's past record, and the likelihood of his future criminality has frequently been shown to be important in the determination of the sentence imposed within the discretion statutorily available to the judge. In those many statutes that specify the aggravating and mitigating circumstances to be taken into account in fixing sentences, the likely future dangerousness of the offender is frequently expressly included in the list of aggravating factors. The specification that the offender does not present a threat of future injury, and the approval therefore of a penalty—say probation—less severe than the imprisonment that otherwise might be ordered may itself function as a prediction of relative dangerousness to those not so selected as "safe."

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8. MODEL PENAL CODE § 7.07(4) (Official Draft 1962).

9. *See, e.g.*, ILL. ANN. STAT. ch. 38, § 105-1.01 (Smith-Hurd 1980); WIS. STAT. ANN. § 975.01 (West 1985).

10. Pub. L. No. 91-452, tit. 10, 84 Stat. 948, *repealed by* Sentencing Reform Act of 1984, Pub. L. No. 98-473, tit. 2, ch. 2, 98 Stat. 1987.

7. Sentencing of young offenders in juvenile courts seems even more clearly than that of adult offenders to be largely based on predictions of their probable criminality—on the likely pattern of their lives if they are not detained.

8. Parole is widespread. Those less likely to commit a crime during the parole period may be released; those more likely may be held. In the federal system and several states, these predictions are quantified into parole prediction tables. Many criticize this whole development, but rarely on the ground that it is usurpation of power based on mistaken predictions.[11]

9. Recent prison crowding combined with judicial orders limiting overcrowding have compelled the early release of prisoners in several states before the completion of their prison terms, less time off for good behavior. In every instance, efforts were made—and publicized—to insure that the less dangerous were being selected for earlier release and the more dangerous detained to complete their terms.

10. Bail practice is another excellent example of express predictions of dangerousness. The received doctrine is that bail is adjusted to the prediction of the accused's likelihood of appearance for trial—not a prediction of dangerousness—but it is the common knowledge of the profession that judges do take into account the likelihood of criminality, particularly serious criminality, prior to trial. Elsewhere, in both common law and civil law countries, the fiction of the nonconsideration of the likely dangerousness of the offender prior to trial has been abandoned, and there is strong pressure in this country for its attenuation and eventual abandonment, provided speedy trials can be arranged for those detained as dangerous.

11. A grim conclusion to this catalog: Recent initiatives for the reinstatement of capital punishment have led in several states to the possibility of the application of that punishment instead of protracted imprisonment because, as the Texas Criminal Code, for example, states, "there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society."[12]

Recently, the stakes of these types of predictions have been raised in the criminal law, with career criminal projects being applied at the police and prosecutorial levels and poli-

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11. *See, e.g.*, 18 U.S.C. § 3575 (1982).

12. TEX. CRIM. PROC. CODE ANN. § 37.071(b)(2) (Vernon Supp. 1986).

cies of selective incapacitation at the sentencing level under the apparent belief that legislators, police, prosecutors, judges, and juries are able to select the most dangerous criminals for swifter and more determined prosecution and for more protracted incarceration.[13] In what may become a model for the states, Congress, in 1984, supported the use of predictions of dangerousness in pretrial detention and sentencing decisions.[14]

Though in this essay we focus on problems in the application of the criminal law, parallel developments in the law relating to the civil commitment of the mentally ill merit mention. The law has shifted steadily over the past twenty years toward reliance on predictions of dangerousness to the patient or to others, as well as on a person's mental illness or retardation, as preconditions to civil commitment. Efforts to improve the validity of these predictions by requiring proof of an overt act of injury or threatened injury have been litigated,[15] the argument reaching constitutional proportions, and, as we shall later discuss, a great deal of judicial attention has been devoted to the standard of proof of dangerousness necessary for such a commitment.

One point of importance to criminal law predictions of

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13. James Q. Wilson summarizes the thrust of these programs as follows:

> Prosecutors would screen all arrested persons . . . and give priority . . . to those who, whatever their crime, were predicted to be high-rate offenders . . . . If found guilty, the offender's sentence would be shaped . . . by an informed judgment as to whether he committed crimes at a high or low rate when free on the street . . . . Scarce prison space would be conserved by keeping the terms of low-rate offenders very short and by reserving the longer terms for the minority of "violent predators."

J. WILSON, *supra* note 1, at 286-87.

14. *See* Comprehensive Crime Control Act of 1984, Pub. L. No. 98-473, 98 Stat. 1837; 18 U.S.C.A. § 3142(b) (West 1985) (pretrial detention) ("The judicial officer shall order the pretrial release of the person in his recognizance . . . unless the judicial officer determines that such release will . . . endanger the safety of any other person or the community."); 18 U.S.C.A. § 3553(a)(2)(C) (sentencing) ("The court, in determining the particular sentence to be imposed, shall consider—the need for the sentence imposed to protect the public from further crimes of the defendant . . . .").

15. Here is another dragon that needs to be brought out on the plain: the misuse of alleged predictions of dangerousness to conceal commitments under the civil law based in fact on the person's need for treatment or on a substituted or proxy judgment of what is good for him. *See* Lessard v. Schmidt, 349 F. Supp. 1078 (E.D. Wis. 1972), *vacated on separate grounds*, 414 U.S. 473 (1974).

dangerousness arises from the burgeoning experience with these predictions as a basis for civil commitment. Short-term predictions, made in times of impending crisis and limited in effect, prove to have much higher levels of reliability than longer-term predictions that the patient, if released, will be a danger to himself or others.

The necessity of acting upon short-term predictions of harm, for example the threats of an angry husband in a domestic relations dispute or the threat of suicide by one severely depressed, seems obvious. While ready acceptance of the use of predictions of dangerousness in such situations supports our general point that predictions of dangerousness are a necessary factor in regulating the relationship between individual and state, we are more concerned with the moral problems raised by the use of long-term predictions of violent behavior—predictions covering months and years, not hours and days.[16]

In the discussion so far, "dangerousness" itself has been left vague and undefined. But if we are considering predictions, we must seek agreement, if not precision, on the meaning of "dangerousness." The key elements in defining the

16. The distinct issues raised by the use of short-term predictions of dangerousness appear in the recent Supreme Court decision in Schall v. Martin, 104 S. Ct. 2403 (1984). In *Martin*, the Court upheld a New York statute that allowed pretrial detention of juveniles accused of delinquency if there was "serious risk" that the juvenile would commit another delinquent act during the time before trial. The statute was attacked as fatally vague because "it is virtually impossible to predict future criminal conduct with any accuracy." *Id.* at 2417. The majority responded by noting that "from a legal point of view there is nothing inherently unattainable about a prediction of future criminal conduct." *Id.* The majority realized that "[s]uch a judgment forms an important element in many decisions, and we have specifically rejected the contention . . . that it is impossible to predict future behavior and that the question is so vague as to be meaningless." *Id.* at 2418 (citing Jurek v. Texas, 428 U.S. 262, 274 (1976)). In *Martin*, "the detention [was] strictly limited in time." 104 S. Ct. at 2413. The maximum detention was seventeen days for juveniles accused of a serious crime and six days for those accused of a major crime. *Martin* also involved the *sui generis* element of the state's *parens patriae* interest in the juvenile, and the majority seemed to turn the decision on the belief that juveniles "are always in some form of custody." *Id.* at 2410. *See also In re* Gault, 387 U.S. 1, 17 (1966). The majority also failed to distinguish different types of predictions of future criminal behavior, assuming the prediction under the New York statute to be based on a "host" of variables "which cannot be readily codified." 104 S. Ct. at 2418. The use of predictions of future behavior does not require unbounded discretion on the part of the decision maker, and all predictions of dangerous or criminal behavior are not as uneasily based as the Court seems to imply.

term are the type and magnitude of harm predicted and the level of risk (the rate) of that harm; the product of these variables being a measure of total harm that at some point many in our society would agree constitutes dangerousness. The level at which society determines which risks are unacceptable, and the actions justified by such a determination, are suggested later in this essay.

Defining dangerousness for the purposes of our inquiry involves more than simply assessing the risk of injury involved in a given situation. With equanimity—at least without the same sort of fear that is inspired by criminal violence—we all accept more substantial risks of injury than those that flow from criminals. The hazards of industrial accidents, of fire, and of movement in traffic inflict far more physical injury than does violent crime. Yet these are not the types of injury anyone would include for analysis in this essay. The risk from the car is high, the risk from the knife is low; yet we fear the latter more than the former as we move out of doors at night.

Hence, we confine "dangerousness" in this essay to intentional behavior that is physically dangerousness to the person or threatens a person or persons other than the perpetrator—in effect, to assaultive criminality. We do not mean to depreciate the significance of the threats to social welfare of predatory theft and many other types of crime.[17] And generally, we are thinking of graver types of assaultive criminality, since it is our view that serious physical injury to the person or the threat of such injury is what emotionally fuels the whole movement toward the use of predictions of dangerousness in the criminal law, and that it is therefore appropriate to develop our thesis around those harms.[18] A tough case for exclusion is home burglary, since it is an offense that sometimes involves injury to the person or the threat of such in-

17. We also exclude considerations of self-injury as a ground for civil commitment of the mentally ill; the danger to others from a patient, as distinct from the danger to the patient, providing the analogy to the criminal's threat to the physical safety of others. It should be noted that predictions of suicidal attempts can, for some disturbed persons, be made with higher likelihoods than any predictions of violence to others; similarly, predictions of predatory theft can often be made with higher likelihoods than can predictions of physical violence.

18. Though it is a question left for other authors whether predictions of lesser harms at a higher rate might similarly justify the preemptive strike as do larger harms at a lower rate, we suggest that there may well be additional limiting considerations.

jury and generally creates fear of such injury. In sum, we are considering the prediction of what would colloquially be called the behavior of "a violent criminal."

The psychological reality involved in this narrowing of the definition of dangerousness to the behavior of the assaultive criminal is that harms intentionally inflicted on the person generate higher levels of fear than injuries accidentally caused to the person or intentionally caused to property.[19] Be that as it may, this essay is confined to the prediction of violent criminality, though it is hoped that the analysis may be applicable to other harms.

II. EMPIRICAL KNOWLEDGE

Psychologists and psychiatrists have long considered the predictability of "dangerousness,"[20] but only recently have scholars outside those fields explored the limits and uses of predictions of dangerousness. Criminologists interested in parole prediction have also been considering these questions for more than two decades, but legal commentators seem to have avoided, until recently, the difficult jurisprudential issues involved in taking power over an individual based on his dangerousness. Assumptions about the legal relevance of such predictions often turned on perceptions of the accuracy of prediction. The assumption was that until psychologists could predict with a fifty percent base expectancy rate of serious violence or of a threat of violence to the person over some relevant time period that the member of the high-risk group is at large, there was nothing for the lawyer to discuss.[21]

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19. William Lowrance lists an array of considerations influencing safety judgments. W. LOWRANCE, OF ACCEPTABLE RISK: SCIENCE AND THE DETERMINATION OF SAFETY 87-94 (1976). Lowrance's discussion is in the context of dangerous products but the considerations are identical. The extreme fear and dread of assaultive criminality follow from a number of these: such violence is a risk borne involuntarily; the effect is immediate; the risk is unknown to people operating in society; the risk is encountered "nonoccupationally" (in the sense that people rarely choose to live in high crime areas and because we set aside intimate violence); the hazards are "dread"; the harms affect virtually everybody; and the consequences are often irreversible (i.e., the harms are often very severe).

20. *See* J. FLOUD & W. YOUNG, DANGEROUSNESS AND CRIMINAL JUSTICE (1981); J. MONAHAN, THE CLINICAL PREDICTION OF VIOLENT BEHAVIOR 124-34 (1981).

21. This assumption arises from confusion between the minimal standard of proof generally required to find a fact to a legally persuasive degree, and the level of prediction necessary to justify the use of predictions of dangerousness. This error is extensively discussed in Section IV

By conceiving of predictions of dangerousness as "the province of psychiatry,"[22] lawyers foreclosed appropriate jurisprudential consideration of the use of predictions. Recently, the tables have turned: the psychiatric literature and the official statements of the organized profession of psychiatry, paradoxically, stress the unreliability of psychiatric predictions,[23] while the courts increasingly rely on predictions by individual psychiatrists and psychologists. Courts and the psychological professionals each affirm the prediction of dangerousness to be the province of the other. The courts, including the Supreme Court in *Jones* and *Barefoot*, thus allow much greater reliance to be placed on psychological predictions of dangerousness than do the organized professions of psychiatry and psychology.

It is important to determine which types of predictions are appropriate to use. This involves two inquiries. The present discussion will consider practical problems with the various types of predictions and, in particular, the problem with clinical assessments of future dangerousness when used to extend sentences. We later briefly discuss which aspects of a person's life are socially or legally unacceptable as factors in prediction, the paradigm problem being constitutional and moral questions about the use of race as a variable in prediction.

Classifications are often arbitrary, and the classification that follows is not necessarily compelling. Nevertheless, we see three basic paths to the prediction of future behavior.

First, the *anamnestic* prediction: This is how he behaved in the past when circumstances were similar. The assumption is that it is likely that he will behave in the same way now.

Second, the *actuarial* prediction: This is how people like him, situated as he is, behaved in the past. The assumption is that it is likely that he will behave as they did. Actuarial pre-

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below. Base expectancy rates are the background rate—the expected rate—at which a given event occurs across a population. A 50% (or one in two) expectancy rate would mean that of a given group of 100 individuals, 50 would be expected to act in accordance with the prediction.

22. "The idea is deeply rooted that identifying 'dangerous' persons for legal purposes is a matter of diagnosing pathological attributes of character and this is nowadays thought to be the province of psychiatry; 'dangerousness' is presumed to be something for students of abnormal psychology, even when it is not clearly associated with mental illness." J. FLOUD & W. YOUNG, *supra* note 20, at 22.

23. AMERICAN PSYCHIATRIC ASSOCIATION, STATEMENT ON THE INSANITY DEFENSE (1982).

diction is the basis of all insurance and of a great many of our efforts to share and shift risk in the community.

Third, the *clinical* prediction, which is harder to state: "From my experience of the world, from my professional training, from what I know about mental illness and mental health, from my observations of this patient and efforts to diagnose him, I think he will behave in the following fashion in the future." Clinical prediction has elements of the first two, but it includes professional judgments that the psychological literature treats as distinct from the others.[24]

Anamnestic and actuarial predictions are linear in the sense that historical facts to justify the prediction can be produced and adduced, weighed and weighted. Clinical predictions are not like that. They are immune from evidentiary examination except in relation to the reputation, experience, and past success or failure of the predictor. Floud and Young rightly refer to "the *art* of making clinical (individualized) assessments of 'dangerousness.' "[25]

Actuarial predictions are often reliable. Anamnestic predictions also are often very reliable. Indeed, they reach the highest levels of validity. Consider the following:

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24. Of course, predictions, especially clinical predictions, tend to be blended from different sources and elements. And if an actuarial prediction has a clinical element, it falls prey, in part, to the more general criticism of clinical predictions. Our model for actuarial prediction presumes elements that do not require clinical identification. Thus the categorization—the identification of an individual as a member of an actuarially defined group—would not require the expertise of psychologists or psychiatrists. The use of such professions to provide information otherwise obtainable about the subject might well be found inadmissible in the judge's discretion because of overpersuasiveness. Perhaps there is a fourth category encompassing predictions based on the expressed intentions of the potential actor, which we might call *promissory* predictions, whose impact will vary with their content and with their relationship to other anamnestic and actuarial predictors. When such predictions take the form of threats, they themselves constitute a ground for preemptive intervention.

25. J. FLOUD & W. YOUNG, *supra* note 20, at 29 (emphasis added). The psychologist or psychiatrist may present evidence underlying a clinical judgment: this just moves the prediction to one of the testable and therefore acceptable categories. It is not predictions made by psychiatrists or psychologists that we oppose; it is predictions made by such people on an intuitive, untested, and unverifiable basis. If such a professional made a prediction based on validated actuarial evidence, it would be acceptable evidence within our principles. Further, it is worth emphasizing that our skepticism about clinical predictions of dangerousness, in which we find support from the organized profession of psychiatry, does not in any way reflect an underlying skepticism about the great value and importance of psychiatrists and psychologists in many areas.

> He has taken out the old raincoat and exposed his rampant self to the young girls in the park every Friday for the past year. Here he is, this Friday, wearing his raincoat though the weather be fine and he is heading again for the park.

Who says a prediction of only one in three is all you can make in such a situation? Of course, you can make a higher prediction. The fact that you can make a higher prediction in this situation does not controvert what we said earlier; it is a short-term prediction and it does not concern a crime of violence.

Clinical predictions are of a different order. They are more intuitive than testable, except in the result. It seems that the best predictions of human behavior would be based on a combination of all three types of prediction. Such an ideal prediction would observe the pattern of behavior of the person under consideration, would be advised by how others like him behaved in the past, and would also be guided by a total clinical consideration of his case, which would improve on the prediction from the first two categories by taking into account his distinctiveness. It would individualize the prediction to his particular circumstances. Regrettably, this is not workable for the prediction of violent behavior at the present level of our knowledge. Floud and Young, like Monahan, conclude that "[p]sychological theory is not as effective as statistical theory in selecting what is relevant and important."[26] There have been no demonstrations and no claims to demonstrate that the addition of a clinical element in predictions can improve upon actuarial and anamnestic predictions.[27]

This is not to argue that reliance should never be placed on expert clinical or even intuitive lay predictions of violence. In emergency situations, such as the short-term commitment of a mentally ill husband threatening injury to his wife, there is little choice. But where a longer and more significant deprivation of liberty, such as extended incarceration, may result from the determination of dangerousness, clinical predictions must find their validity and reliability in data concerning the nearest like group.

It is important to take stock of current predictive capacities. With our present knowledge, with the best possible long-

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26. *Id.* at 27.

27. *See* D. FARRINGTON & R. TARLING, CRIMINOLOGICAL PREDICTION: AN INTRODUCTION (1983).

term predictions of violent behavior, we can expect to make one true positive prediction of violence to the person for every two false positive predictions.[28] The body of research supporting this modest conclusion is not extensive, but there are no acceptable studies reaching a contrary result.[29] We know of only eight serious prospective studies.[30] Retrospective studies are a different matter—they are only the first steps on which predictions might be built.

The assumption that three individuals must be controlled if the violent crime of one (no one knowing which one) is to be prevented is important and necessary to our thesis, since it

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28. Among the most obvious problems with such statistics in predicting a rare event such as severely violent conduct is that researchers may not be aware of some violent occurrences, and thus the predictions may be understated. To the extent that this is true, any reliance on the lower known figure is not made *less* acceptable. Two points should be made: first, the "dark figures" for crimes of violence against the person are lower than for crimes against property or for an amorphous notion of general "recidivism;" and second, prospective studies which follow a group of individuals will be particularly sensitive to events which might not otherwise be noted by the criminal justice system. We reject the use of *any* assumptions made about unreported crime to boost reliance upon predictions.

29. Two recent books survey and summarize what is now known about the prediction of dangerousness. *See* J. MONAHAN, *supra* note 20 (focusing on the state of the art in predicting violence); J. FLOUD & W. YOUNG, *supra* note 20 (considering the use of explicit predictions of dangerousness for "protective sentencing"—the lengthening of sentences for offenders identified as "dangerous"—and examining questions of how and when predictions of dangerousness can justly be used in the criminal law). In other papers, Monahan offers his view on the appropriate application of such predictions in the criminal law; Monahan, *The Prediction of Violent Behavior: Toward a Second Generation of Theory and Policy*, 141 AM. J. PSYCHIATRY 10 (1984); Monahan, *The Case for Prediction in the Modified Desert Model of Criminal Sentencing*, 5 INT'L J. L. & PSYCHIATRY 103 (1982); Monahan, *The Prediction of Violent Behavior: A Methodological Critique and Prospectus*, in DETERRENCE AND INCAPACITATION: ESTIMATING THE EFFECTS OF CRIMINAL SANCTIONS ON CRIME ROLES 244 (A. Blumstein, J. Cohen & D. Nagin eds. 1978) [hereinafter cited as *Methodological Critique*]. In this essay, we rely on Floud and Young and on J. MONAHAN, *supra* note 20, for the empirical assessments of predictive capacities relevant to our analysis, and we have been greatly assisted by their reflections on the jurisprudential issues. Floud and Young have generated extensive debate among English criminologists. *See Dangerousness and Criminal Justice: A Collection of Papers*, 22 BRIT. J. CRIMINOLOGY 213 (1982). *See also Predicting Dangerousness*, J. CRIM. JUST. ETHICS, Winter-Spring 1983, at 3. Excellent and reasonably current bibliographies of the relevant literature concerning both the empirical and the jurisprudential aspects of dangerousness are supplied by J. FLOUD & W. YOUNG, *supra* note 20, at 203-15, and J. MONAHAN, *supra* note 20, at 124-34.

30. Excellently summarized in *Methological Critique*, *supra* note 29.

forces us to confront issues that our current verbal manipulations of imprecise burdens of proof and of unquantified articulations of risk allow us to finesse. And when that confrontation occurs, the problem shifts from one of language and statutory interpretation to one of morality—of the proper balance between state authority and personal autonomy. The assumption on which we will present our theory of the proper use of long-term predictions is that no research on this topic, in this country or in Western Europe, claims a capacity to select a group of persons, no matter what their criminal records, who have a fifty percent base expectancy rate of serious violence or of a threat of violence to the person over the next five years they are at large. The Supreme Court in *Barefoot*, both the majority and the minority, accepted that proposition. "[T]he 'best' clinical research currently in existence indicates that *psychiatrists 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 who were diagnosed as mentally ill.*"[31]

It is partly because predictive capacity is at this level that the entire area has been neglected by legal commentators. There is a tendency to dismiss it as so low, so unreliable, as not to merit consideration. But that is a serious error. Given the relative rarity of the event to be predicted—violent criminality—a base expectancy rate of one in three is not a low rate of prediction: it is a very high rate of prediction. The relationships among personal characteristics and social circumstances—among character, personality, and chance—are obviously of extreme complexity and thus most difficult to predict; but a group of three people, one of whom within a few months will commit a crime of extreme personal violence, is a very dangerous group indeed.

It should be recognized that these studies analyzing the limits of our predictive capacities leave out of account a few very rare individuals so disturbed and dangerous that no one considers them likely candidates for freedom. There are exceptional, gravely psychotic, extremely and repetitively violent persons whose likely future criminality does not merit study since it is so obvious.[32] And, of course, there are ex-

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31. Barefoot v. Estelle, 463 U.S. 880, 900 n.7 (1983) (citing J. MONAHAN, *supra* note 20, at 47-49).

32. There is, of course, the question how proof would be taken about such exceptional individuals. Usually their records will foreclose the

treme cases of repetitive murder where the ordinary processes of the criminal law preclude consideration of the offender's future dangerousness. There is no need to make statistical predictions about such individuals. Their patterns of behavior—on which a clear anamnestic prediction could be made—remove any need or use for more subtle statistical identification. These extreme cases throw no light on the reality of the problem we confront, which is the propriety of restricting the freedom of those who are not such clear cases and yet have characteristics, histories, and social circumstances that indicate their high levels of dangerousness.

Finally, it is important to recognize that the choice facing the criminal justice system is not whether explicit, statistical predictions of dangerousness should be used at all; rather, the choice is between using explicit predictions, whether statistical, clinical, or intuitive, and using implicit, intuitive predictions. Proposals must be considered against the backdrop of the actual world of inaccurate intuitive predictions, not compared with an ideal world of perfect knowledge and exact predictions against which any proposal will seem inadequate.

By viewing the problem as a choice between statistical predictions and implicit predictions, judges and legislatures can squarely face the ethical and practical problems raised by the use of explicit predictions of dangerousness in the criminal justice system. Furthermore, we reject abstract and unfocused discussion about the use of statistical predictions in the criminal law; sensible debate can only occur in the context of specific proposed uses of predictions.

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lurking difficulties in this question. In a letter commenting on an earlier draft of this essay, Monahan provided a pungent story to explicate this point. He wrote of speaking to a federal judicial sentencing conference:

> I gave my stock speech about the probability of violence never being higher than 1-in-3 in the research. A judge raised his hand and said that he recently had a case of a murderer with a large number of prior violent offenses who, when asked if he had anything to say before sentence was imposed, stated: "if I get out, the first thing I am going to do is murder the prosecutor, the second thing I am going to do is murder you, Your Honor, the third thing I am going to do is murder every witness who testified against me and the fourth thing I am going to do is murder each member of the jury." The judge asked if I thought that this person's probability of violence was no greater than 1-in-3. I called for a coffee break.

Letter from John Monahan to Norval Morris, February 27, 1984.

III. Prediction and Risk Shifting

A. *Individual Justice Concerns*

It is widely recognized that "statistical predictions are made for groups and not for individuals;"[33] yet, as Floud and Young observed, critics of the use of predictions often make the "mistake . . . of identifying statistical entities . . . with particular, misjudged individuals."[34] A statistical prediction of dangerousness, based on membership in a group for which a consistent and tested pattern of conduct has been shown, is the statement of *a condition* (membership in a defined group with possession of certain attributes) and not the prediction of a *result* (of future violent acts in each individual case). This is not reflected in the language of "false positives" and "false negatives," which imply the total absence of the predicted condition: here, dangerousness.[35] Floud and Young point out that "[e]rrors of prediction do not represent determinable individuals . . . . *But the fact that if we were to set them at liberty, only half of those we are at any time detaining as dangerous would do further serious harm, does not mean that the other half are all in this sense innocent.*"[36]

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33. D. Farrington & R. Tarling, *supra* note 27, at 20.

34. J. Floud & W. Young, *supra* note 20, at 21.

35. Positive predictions which come true are known as "true positives." Positive predictions which do not come true are known as "false positives." Similarly, predictions that an event will not occur which are correct are known as true negatives, while negative predictions which do occur are false negatives. The follwing chart illustrates the four possible outcomes of predictions:

		Actual Behavior	
		Does Occur	Does Not Occur
Predicted Behavior	Will Occur	True Positive	False Positive
	Will Not Occur	False Negative	True Negative

36. J. Floud & W. Young, *supra* note 20, at 48 (emphasis added). The theoretical model of the behavior being predicted has a critical impact on the meaning of the terms "false positive" and "true positive." As a simple, initial question, it matters whether the predicted event exists in only two states—pregnant or not pregnant—as contrasted with a degree of dangerousness. If the latter is the case, then any two state model imposed on a continuum ("dangerous" or "not dangerous") must be arbitrary and will

The epistemology of prediction provides no grounds for predictions of individual behavior; it refers by nature to predictions of the behavior of defined groups of individuals. The individual in question always belongs, by virtue of certain stated and previously tested characteristics and circumstances, to a group with a given likelihood of specified behavior, here of violent criminality. It is the justice of applying to each individual powers influenced by his membership in that group that is at issue.

Analogies to dangerous objects rather than to dangerous persons may help clarify these points. If the event or result being predicted were fixed *a priori,* and the result did not involve an interaction between the object and circumstance, then given a prediction of dangerousness, false positives could correctly be viewed *ex post* as never having been dangerous in fact (even if, by definition, they were not so identified originally).

In contrast—and we will give this example some historical perspective to make it easier to appreciate—think of the postwar days in London. For some time after the war, unexploded bombs would be found and would have to be moved and rendered safe. Death and severe injuries were very rare; the base expectancy rate was very low; there were large numbers of "false positives" for every "true positive"—bombs that did not go off, as distinguished from those that did. Yet, assuming that all or virtually all of the bombs did have the *potential* to detonate, no one would say that because it proved to be a "false positive" it was not dangerous. That is not how words are used when the focus is dangerous objects as distinct from dangerous people, yet where the eventuality of the predicted event is a product of a range of characteristics inherent in the object and chance, the similarities of risk and analysis are great. Floud and Young refer to this as "the dynamic interaction of [the individual's] character and circumstance."[37]

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force the person defining the point at which the two states change to recognize some justification for choosing that line. The difference between, e.g., predicting recidivism and predicting dangerousness is that, given a precise definition of recidivism, a person either will or will not have committed an offense at a particular point in time. Recidivism is an event; dangerousness is a condition—a "probabilistic condition."

37. *Id.* at 57. Floud and Young think that the element of chance "must be very large" even when there is an optimal prediction of an individual's character. *Id.* Perhaps the randomness, the element of circumstance and chance, is as large as two in three for certain types of extreme

We do not mean to suggest that all members of a group predicted to be dangerous are necessarily violent by nature. It is not necessarily true that each member of a group predicted to be highly dangerous will be dangerous even in some small degree: some eternally docile individual with bad luck might fulfill all of the requirements of membership in a particular high-risk group; there really is a "road to Damascus" (i.e., some people actually change their lives or have them changed by a religious or other profound experience), and people do grow older and burn out. We believe the distribution of violent tendencies within groups predicted to be highly dangerous will be narrow, yet we must, of course, recognize that some of the individuals so predicted may not have much potential for violence. Yet our justification for using predictions of dangerousness in the criminal law does not rely solely on our conception of human nature.

Conversely, of course, some people are dangerous though not predicted to be dangerous (the social scientist's "false negative"); the likelihood of potential violence is distributed within the group predicted not to be dangerous in the same sense that it is distributed in the group predicted to be dangerous. The *prediction* of dangerousness is usually an all-or-nothing, two-state prediction, but dangerousness itself is distributed over a range of levels even within a fairly narrowly-defined group. The tension and problems arising from "two-state" artificial modeling must be recognized.

The conceptual difficulty in viewing a prediction of dangerousness as the identification of membership in a group with a certain likelihood of harm stems, in part, from the language of prediction, and especially the language of true and false positives, which seems to point to the *outcome* in each individual case. Considering the use of the terms "prediction" and "dangerousness," Monahan observes that dangerous behavior "may be thought of as a prediction itself." It might be preferable, as Monahan suggests, to refer not to predictions of "dangerous behavior" but to predictions of "violence."[38] We suggest that the same clarity would come out of focusing on the identification of individuals as members of groups which exhibit high levels of violence rather than on predictions of individual dangerousness. Similar precision would come from referring to the "assessment" or "evaluation" of the potential for violence; yet the language

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and rare behavior.

38. J. MONAHAN, *supra* note 20, at 5.

of predictions of dangerousness is so entrenched in the writings of courts and scholars that we do not seriously propose a change in usage. We seek only conceptual clarity.

Concern about requiring the innocent to pay for the violent[39]—viewing the false positives as people who were, *a priori,* not dangerous but who must pay for the individuals who become true positives and hence were, *a priori,* the only "dangerous" members of the group—arises as an analogy to the principle of the criminal trial: that it is better that nine guilty men be acquitted than one innocent man be found guilty. This line of reasoning, though it has persuaded many commentators and some judges, is deeply flawed.

If one truly read a statistical prediction of one in three to mean that one person was "bad" or "guilty" and the other two "innocent" or "harmless," then under no circumstances would statistical predictions of dangerousness be acceptable grounds on which to restrict any person's liberty. The analogy to the criminal trial would hold true, and even if we could predict nine in ten, we would not be justified in detaining the tenth, "innocent" member of the group. And, of course, we could never civilly commit anyone, except for very short periods, as there would be no justification for detention under present theory. It seems odd that we are more willing to use predictions of dangerousness to detain those whom we think of as less culpable for their acts.

This same challenge to the use of predictions of dangerousness can be stated in terms of legal doctrine forbidding punishment for "status" offenses.[40] This is no different than arguing that uses of such predictions are unjust because a person is allegedly "punished, not for what he has done, but for what it is believed he may do in the future."[41] These claims have some merit where predictions would be used to justify punishment beyond what would be justified in the absence of the prediction, and we oppose such uses in part on

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39. Innocence here meaning only a false positive. See the discussion at Section IV below, of the evidentiary considerations surrounding Addington v. Texas, 441 U.S. 418 (1979).

40. *See* Robinson v. California, 370 U.S. 660 (1962); Lambert v. California, 355 U.S. 225 (1957).

41. SWEDISH NATIONAL COUNCIL FOR CRIME PREVENTION, A NEW PENAL SYSTEM (1978); Von Hirsch & Gottfredson, *Selective Incapacitation: Some Queries about Research Designs and Equity,* 12 N.Y.U. REV. L. & SOC. CHANGE 11 (1983). This argument often assumes that retribution is the only justifiable aim of a sentence. *See* Walker, *Unscientific, Unwise, Unprofitable or Unjust?,* 22 BRIT. J. CRIMINOLOGY 276 (1982) (attacking this assumption).

this ground.[42] Where predictions are denied an extraordinary force in justifying a deprivation of liberty, the predictions serve not to justify punishment, but to distribute punishments otherwise justified and the "status" offense concern is fully answered.[43]

A prediction of dangerousness, then, is a statement of a present condition, not the prediction of a particular result; and further, within our limiting principles, we must act on the condition independently of the result. The belief that it is the prediction of a result is an error that is constantly made and leads many astray. In sum, that the person predicted as dangerous does no future injury does not mean that the classification was erroneous, even though the prediction itself was wrong.

A prediction of the likelihood of harm does not and cannot in itself explain how such predictions should be used in the criminal law. The just application of predictions of dangerousness involves a societal determination of what levels of risk and harm are unacceptable. In looking at any risk imposed on society, there is the question of who should bear that risk. In the case of the risks and harms imposed by the use of certain pesticides and fertilizers, a social determination must be made of who will bear the risk: consumers (through the harms caused by the chemical), farmers (through reduced productivity if these substances are banned), taxpayers (through the government), or industry. In the case of the danger from violent criminals, the determination that must be made is whether society or members of the group predicted to be violent should bear the costs of their threat.[44]

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42. We distinguish between "customary" uses of predictions—within punishment otherwise justified—and unacceptable extraordinary uses of predictions. *See* Miller, *Legal and Ethical Limits on the Use of Predictions of Dangerousness in the Criminal Law,* in THE PREDICTION OF CRIMINAL VIOLENCE (F. Dutile & C. Foust eds. 1986).

43. *See* H.L.A. HART, PUNISHMENT AND RESPONSIBILITY (1968).

44. Floud and Young, in the context of justifying extended sentences for offenders predicted as dangerous, note that the analogy to the criminal trial

> misrepresents the moral choice that has to be made in considering whether protective measures may be justly imposed. The question is not "how many innocent persons are to sacrifice their liberty for the extra protection that special sentences for dangerous offenders will provide?" but "what is the moral choice between the alternative risks: the risk of harm to potential victims or the risk of unnecessarily detaining offenders judged to be dangerous . . . ." The problem is to make a just redistribution of risk in circum-

The societal decision, the moral decision, is not whether to place the burden of avoiding the risk on false positives, but how to balance the risk of harm to society and the certain intrusion on the liberty of each member of the preventively detained group. At some level of predicted harm from the group, the intrusions on each individual's liberty may be justified. Thus, again in the context of extending sentences, the goal is "a just redistribution of certain risks of grave harm: the grave harm that potentially recidivist offenders may do to their unknown victims and the grave harm which is suffered by offenders if they are subjected to the hardship of preventive measures which risk being unnecessary because they depend on predictive judgments of their conduct which are inherently uncertain."[45] This assumption presupposes that the risk can be quantified as a base expectancy rate and the harm defined with some precision and, further, that it can be substantially shifted from the community, the cost of the shift being paid by the individual by his being controlled in one or another fashion, usually by detaining him in custody.

Let us assume a properly convicted criminal, criminal X, with a one-in-three base expectancy rate of violence (as we have defined it), and another criminal, criminal Y, also properly convicted of the identical offense, but with a very much lower base expectancy rate—same record, same offense. Unlike X, Y was not a school dropout, and he has a job to which he may return and a supportive family who will take him back if he is not imprisoned, or after his release from prison. May criminal X be sent to prison while criminal Y is not? Or may criminal X be sent to prison for a longer term than criminal Y, despite the same record and the same gravity of offense, the longer sentence being justified by the utilitarian advantages of selective incapacitation? Our answer to both questions is that he may.

To justify protective sentencing, the level of prediction must be high and the threatened harm severe, whereas a much lower level of risk may properly be relied on to justify a lesser deprivation of liberty. It is sometimes suggested that it is improper to restrict liberty at all on weak predictions of future harm. Confining ourselves to predictions of future violence to the person, we shall suggest situations in which it would be entirely proper to exercise state power to restrict

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stances that do not permit of its being reduced.
J. FLOUD & W. YOUNG, *supra* note 20, at 49.

45. *Id.* at xvii.

individual autonomy on the basis of such a prediction. A somewhat frivolous example may make the point. At the 1983 annual meeting of the National Rifle Association (NRA), when President Reagan undertook the heavy burden of persuading the NRA membership of the virtues of the handgun, all those attending had to pass through metal detectors as they entered the auditorium to insure that they were not entering the President's presence in their usual heavily armed condition. The authorities responsible for the President's security had properly formed the view that the audience presented a higher base expectancy rate of an assassination attempt than another audience of similar size—since not all the President's audiences are so tested (though it would not matter to the thrust of this example if they were). We do not know the base expectancy rate of an assassination attempt; let us guess at one in a hundred million. Is it reasonable to impose the obligation of passing through a metal detector on the basis of such a low prediction? Of course it is.

Similarly, if someone about to board an airplane matches the risk profile for a hijacker, it is probably an appropriate interference with that person's freedom to ask him to step aside and answer a few questions and, if some ground warrants it, to search him.[46] Always, the base expectancy rate—the relationship between the true positive predictions (e.g., one in a hundred million) and false positive predictions—must be balanced by two further considerations: How serious is the interference with liberty involved in preventing the possibility of that prediction coming true, and how serious is the injury if it does come true?

Take the NRA convention case another step. Should anyone with a past record of threatening the President be excluded from the auditorium? A very slight risk of a most serious injury without any grave interference with the rights of the person affected is a justification in our view for invocation of state authority. So dangerousness should be balanced in relation to the extent of the harm risked, the likelihood of its occurrence, and the extent of individual autonomy to be invaded to avoid the harm. It is important to recognize that determinations of what levels of risk and harm are unacceptable are inherently policy determinations. Defining unacceptable levels of dangerousness thus emerges as a social and po-

46. *See* United States v. Lopez, 328 F. Supp. 1077 (E.D.N.Y. 1971) (discussing the ethics of hijacker screening and upholding the constitutionality of such a system).

litical, rather than an empirical, task.[47]

The distinction between the determination of risk and harm and the political decision as to when the risk and harm are unacceptable and justify certain action—is made clear in the parallel context of societal hazards brilliantly discussed by Lowrance.[48] After outlining the measurement of risk from various objects and activities, Lowrance notes that he has avoided the term "measuring safety," because safety is not measured but determined by weighing social values.[49] In Lowrance's definition, "a thing is safe if its attendant risks are judged to be acceptable."[50] While Lowrance does not include the risk of harm from human beings, the parallels with our discussion are clear. Measuring the probability and severity of harm from a group "is an empirical, scientific activity."[51] Determining dangerousness—"judging the [un]acceptability of risks—is a normative, political activity."[52]

Isolating this element of balance, and the corresponding social determination inherent in any use of predictions of dangerousness in criminal law, makes it clear that decisions about the use of dangerousness are relativistic and judgmental, not absolute. The relative nature of predictions can be clarified in a rhetorical fashion by noting that a law that extended the term of any felon "found to be twenty times as likely to be violent over the course of the next five years as the average criminal," however unjust, would not seem unacceptable or illogical on its face, even if the base expectancy rate of violence for the felons identified as "twenty times more dangerous" were at a predicted level of one in three, a level many deem absolutely unacceptable.

That predictions are most valuable as a way of distinguishing between individuals in similar situations is not hard to understand. An individual is most readily understood to be

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47. J. FLOUD & W. YOUNG, *supra* note 20, at 4-5, 9. "It is a truism that the selection of certain kinds of conduct as making a man eligible to be treated as 'dangerous' . . . is essentially a political process." *Id.* at 9. The critical role of social judgment has been more generally recognized in the context of civil commitment. *See also* State v. Krol, 68 N.J. 236, 260-62; 344 A.2d 289, 302 (1975).

48. W. LOWRANCE, *supra* note 19.

49. *Id.* at 75.

50. *Id.* Courts have had more luck comprehending the scope of the social policy determinations involved in dealing with the risk from things as opposed to people. *See, e.g.*, Dalerko v. Heil Co., 681 F.2d 445 (5th Cir. 1982).

51. W. LOWRANCE, *supra* note 19, at 75.

52. *Id.* at 76.

dangerous compared with other persons, and the aim of isolating dangerous criminals makes sense only if we recognize that there are other criminals who are less dangerous. The appropriate use of predictions thus requires that before we attach the label "dangerous" to any person, or criminal, we must identify the group in reference to which the claim of dangerousness is made. In part, this determination must be practical. If the group is made up of individuals identical in all respects, it is not possible to distinguish between them on any relevant grounds. On the other hand, comparing all felons with the general population would be likely to lead to felons' being identified as a more dangerous group. The need to establish a category for a meaningful judgment about dangerousness is often intuitively apparent to inmates: when asked whether there are dangerous criminals, many inmates laugh, or reply jokingly, "We are all dangerous," while the answer to the question "Are there some inmates who are more dangerous then others?" is often precise and certain—the smiles disappear, and the inmates describe which colleagues they perceive to be more dangerous than others and why.

As an approach to suggesting how the notion of risk shifting should be applied, consider the hypothetical case of a sixteen-year-old black youth who has just dropped out of school and who has no employment, whose mother was herself a child on welfare when he was born, who does not know his father, who runs with a street gang, and who lives in a destroyed inner-city neighborhood. Assume that we can assess the risk of his being involved in the next six months in a crime of personal violence. Let us give him a base expectancy rate of violence of one in twenty, to be conservative. That risk now rests on the community in which he lives. May we, without further justification, at this one-in-twenty level, shift that risk from the community and make him bear the cost of the shift in the coinage of institutional detention until we can do something to reduce the risk, by retraining him or by allowing time to pass while the threat he presents diminishes? Clearly not. But let him be involved in a nonviolent crime, say, shoplifting, and even if that conviction makes no difference to his base expectancy rate of a crime of violence, there is no doubt that in practice we would then take into account the risk of a crime of violence in deciding what to do about him and for what length of time. Within our sentencing discretions, we would take into account the risk of violence he presents.

The balance of risk to the community and the restriction of individual liberty is a policy question to be determined by the legislature. For example, the legislature may choose, as a policy decision, to set sentencing standards or ranges which accommodate the "dangerous" cases. But legislatures cannot exercise an unlimited freedom in making policy choices about the use of predictions.[53] If a legislative enactment does not make clear what levels of dangerousness are acceptable, however, it falls on the courts to determine the balance between the likelihood of injury—the extent of potential harm—and the extent of the restriction on individual liberty that is justified in decreasing the risk and related harm.[54]

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53. The legislative judgments about the use of predictions of dangerousness pose a substantial threat to a theory such as ours which rests on the restrictive use of predictions as a guide to the distribution of punishment within ranges defined on other grounds. Our theory places absolute limits on the use of these predictions by everyone except a legislative body, although similar reasons should sharply limit legislative reliance on predictions alone to alter the bounds of state power over individuals. We recognize the necessary breadth of legislative powers in a democratic society. But there are some real constitutional limits to the choices the legislature may make—both due process and equal protection concerns come immediately to mind as far as the use of predictions is concerned. We urge sensitivity by legislative bodies whenever predictions are used to create new rules, powers, and controls over the individual. Any exceptional use of predictions, such as pretrial detention, which survives basic constitutional challenge, should require the highest levels of proof and permit restrictions of individual liberty to the minimum extent possible.

54. That a judge has the power to take individual factors into account in sentencing—including factors presented to the judge that would violate the "rigid rules of evidence"—is unquestionable under the modern sentencing theory developed by Justice Black in Williams v. New York, 337 U.S. 241 (1948). Justice Black observed that "modern concepts individualizing punishment" require access to information not relevant or admissible in a trial: "The belief no longer prevails that every offense in a like legal category calls for an identical punishment without regard to the past life and habits of a particular offender" and "punishment should fit the offender and not merely the crime." *Id.* at 247.

The doctrine remains vital—*see, e.g.*, Roberts v. Louisiana, 420 U.S. 325, 333 (1976)—and has been adopted in many states. *E.g.* Elson v. State, 659 P.2d 1195 (Alaska 1983); State v. Conn, 137 Ariz. 148, 669 P.2d 581 (1983) (en banc). Justice Black recognized the potential for abuse by judges with such broad discretion and sources of information. "Leaving a sentencing judge free to avail himself of out-of-court information in making such a fateful choice of sentences does secure to him a broad discretionary power, one susceptible of abuse." *Williams*, 337 U.S. at 251. We believe that the principled use of predictions of dangerousness would limit possible abuses by judges in sentencing. Thus, the sentencing judge has the clear power to operate in a principled fashion regarding predictions of dangerousness, even in the absence of legislative guidance.

One final but important point about the morality of using predictions involves the context within which the problems with statistical predictions must be considered. We begin with the recognition that we are often going to be wrong in making predictions. But concern about these errors ignores the fact that the choice to be made is between using explicit statistical predictions and using implicit predictions. The issue is the relative accuracy, not the absolute accuracy, of the statistical prediction. Looking at the problem in this light, the evidence indicates that nonstatistical predictions in bail and sentencing decisions repeatedly produce errors—incorrect predictions—at higher rates than do more scientific predictions. Forst, citing numerous studies, concluded that "nonstatistical prediction in bail and sentencing decisions has in fact been found repeatedly to produce errors at a higher rate than the more scientific approach."[55] Gottfredson explained that implicit and untrained judgments show larger rates of error than statistical predictions, and concluded that statistical devices outperform intuition.[56] This evidence indicates that the use of statistical predictions of dangerousness in these areas, rather than subjective or intuitive predictions, would reduce the level of incorrect predictions. What is true of bail and sentencing decisions may well be true of the broad range of decisions throughout the criminal justice system which turn on implicit predictions of dangerousness.

If the use of explicit predictions in sentencing and bail decisions, based on statistical evidence, reduces the level of error, then it is unethical to continue the present intuitive application of discretionary powers. The decision *not* to use explicit predictions may pose ethical dilemmas as great or greater than the decision *to use* such predictions. If the evidence is correct, it supports an argument—based on greater individual justice rather than any notion of efficiency—for

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There are difficult questions about the evidence that can be used in sentencing raised by the special protections given juvenile offenders and juvenile records. Young males commit a disproportionate number of violent offenses. Yet if juvenile records are excluded from a prediction of dangerousness, as a sentencing determination, the peak of individual violence may well have been passed when the utilitarian effects of using the prediction are applied. These problems are beyond the scope of this essay.

55. Forst, *Selective Incapacitation: A Sheep in Wolf's Clothing?*, 68 JUDICATURE 153, 157 n.9 (1984).

56. Gottfredson, *Statistical and Actuarial Considerations* in THE PREDICTION OF CRIMINAL VIOLENCE (1986).

the cautious and careful use of explicit predictions at least to guide discretionary decisions.

B. *Racial Bias in Predictions*

Because minorities, especially blacks, constitute a disproportionate percentage of defendants and prisoners, *any* prediction program in criminal justice will affect proportionately larger numbers of minority individuals than majority individuals. Further, many systems of prediction rely on information—like poor employment records, educational deficiencies, residential instability—that more commonly characterize minority communities. When such information is used systematically to distinguish high or low risk groups, it therefore tends to burden minorities.

The danger and hidden character of implicit predictions throughout the criminal justice system must again be emphasized. Implicit, intuitive judgments about future behavior made in exercising discretionary powers are *most* likely to discriminate against blacks. The explicit use of predictions may, by setting general standards, *limit* the current racial patterns in criminal justice outcomes. It is much easier for bias or prejudice, unconscious or otherwise, to enter into a discretionary process when there are not neutral, or at least testable, principles to guide the decision. Therefore, we see predictions of dangerousness, used as a guide to discretion, as a tool which is likely to *reduce* the impact of racial bias.

It is important to consider the evidence on whether the disproportionate numbers of blacks in the criminal justice system are the product of bias. Research indicates that there is little or no difference in terms of the likelihood that convicted criminals of different races will commit future crimes.[57] Other studies indicate that the disproportion between the races in the number of persons arrested mostly results from differences in rates of involvement in crime.[58] In other words, blacks and whites convicted of index crimes are nearly equally likely to be imprisoned and, later, to be rearrested.

Consequently, significant disparity in decisionmaking, on a racial basis, is not likely to result from the explicit use of predictions of dangerousness after conviction—for example

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57. *See, e.g.*, J. PETERSILIA, RACIAL DISPARITIES IN THE CRIMINAL JUSTICE SYSTEM (1983).

58. *See, e.g.*, Blumstein & Graddy, *Prevalence and Recidivism in Index Arrests: A Feedback Model*, 16 LAW & SOC'Y REV. 265 (1981/82).

at sentencing or in prison administration or early release. In other words, to the extent that employment of statistical predictions of dangerousness results in discrimination against minorities, this discrimination is not the result of using statistical predictions but of existing bias in the system. Finally, to the extent that unequal impacts are suffered by different racial groups, it is better that the problem be faced head on. The issue of predictions should not be used to hide from the fact that racial disparities remain in the criminal justice system.

IV. DANGEROUSNESS: EVIDENCE AND PROOF

The greatest bar to a sensitive judicial consideration of the appropriate role of dangerousness at various stages in the criminal and mental health law has been the confusion between standards of proof required to find criminal guilt (or to identify those subject to the state's powers under the mental health law), and the level of confidence required for the proper use of predictions of dangerousness. This confusion has been entrenched by the Supreme Court. Evidentiary problems concerning the proper role of psychologists in predicting dangerousness stem from this basic error. We will examine judicial consideration of the concept of dangerousness in the criminal law in recent Supreme Court cases.[59]

In *Addington v. Texas*,[60] the Supreme Court held, without dissent, that in a civil commitment hearing, the due process clause of the fourteenth amendment requires a standard of proof, on the issues of the patient's mental illness and of his danger to himself or to others, equal to or greater than "clear and convincing" evidence. The Court recognized the difficulty of quantifying, even of clearly stating, the differences among the usual three standards of proof—balance of probabilities, beyond reasonable doubt, and an intermediate standard of clear and convincing evidence—but saw the distinctions as "more than an empty semantic exercise."[61] The

59. The concept of dangerousness in the criminal law is a relatively recent addition to Supreme Court jurisprudence. The Court has considered the use of predictions of dangerousness in only twenty cases, ten in the past three years, and never before 1972. Of all of these cases, civil and criminal, only seven involved extended discussions of dangerousness.

60. 441 U.S. 418 (1979).

61. *Id.* at 425 (quoting Tippett v. Maryland, 436 F.2d 1153, 1166 (4th Cir. 1971) (Sobeloff, J., concurring in part and dissenting in part), *cert. dismissed sub nom.*, Murel v. Baltimore City Criminal Court, 407 U.S. 355 (1972)).

court saw the distinct levels of proof as an expression of "the degree of confidence our society thinks [the fact finder] should have in the correctness of factual conclusions for a particular type of adjudication."[62]

One of the reasons the Court was satisfied by the "clear and convincing" standard in an issue involving deprivation of individual liberty, rejecting the need, as a constitutional matter, for proof beyond reasonable doubt,[63] was that "*[g]iven the lack of certainty and the fallibility of psychiatric diagnosis there is a serious question as to whether a state could ever prove beyond a reasonable doubt that an individual is both mentally ill and likely to be dangerous.*"[64] In explaining this statement, Chief Justice Burger noted that "[t]he subtleties and nuances of psychiatric diagnosis render certainties virtually beyond reach in most situations."[65] The end result of requiring the highest standard of proof for findings of dangerousness, in Chief Justice Burger's view, would be that jurors and judges "could be forced by the criminal law standard of proof to reject commitment for many patients desperately in need of institutionalized psychiatric care."[66]

The Court must be wrong. The decision in *Addington* may well be supported by other considerations, but it is not justified by the impossibility of proving risk beyond a reasonable doubt. That an individual is likely to be dangerous *can* be proved at any level required, provided "likely to be dangerous" is given careful construction. If that phrase is defined as "belonging to a group with a risk of dangerous behavior unacceptable in relation to its gravity, if the harm occurs, balanced against the reduction of individual freedom involved in its avoidance," then the existence of the likelihood of injury can be proved at the same level as many other facts. It is a fact in the same sense that a broken bone is a fact. By contrast, if the phrase "likely to be dangerous" is

62. *Id.* at 423 (citing *In re* Winship, 397 U.S. 358, 370 (1970) (Harlan, J., concurring)).

63. Many state civil commitment statutes continue to require proof beyond reasonable doubt in this context. *See* Addington v. Texas, 441 U.S. 418, 431 n.5 (fourteen states requiring proof beyond a reasonable doubt when *Addington* was decided in 1979).

64. *Id.* at 429 (emphasis added). As we noted earlier, the language of predictions can be very awkward. Here, the Court writes of an individual who is "likely to be dangerous," yet "dangerous" itself means likely to be violent or do something harmful in the future.

65. *Id.* at 430.

66. *Id.*

defined as requiring proof on a balance of probability that *this* patient will injure himself or others, or that he is more likely to do so than not, then it cannot be proved at any level of confidence, since it is very rarely so. In the latter perspective, in practice, it can never be proved, since at present our best predictive capacities fall far below the requisite level of proof.

The confusion lies in the admixture of ideas about the probability of future events and the degrees of confidence in facts required by the usual three standards of proof. The existence of dangerousness is not a question of the weight of the burden of proof to be placed on the affirmant of a risk, and it is a mistake to decide the balance between the risk to the community and the restrictions on the individual in terms of the burden of proof. As we have stressed in identifying the elements that lead to a justified use of predictions of dangerousness, the determination of acceptable and unacceptable levels of risk is an entirely distinct policy question to be decided by a legislature or deduced by a judge interpreting a statute that vests sentencing discretion in the judge; the answer is not capable of expression solely as a problem of evidence. Once the risk is defined, the elements that go to prove the existence of that risk can be made subject to different burdens of proof, but not the risk itself.[67]

In one sense—a sense not encompassed within the Court's decision in *Addington*—a requirement of clear and convincing evidence of "dangerousness," or even of proof beyond reasonable doubt of "dangerousness," is achievable and may be appropriate. Assume that a one-in-three base rate sufficiently defines that condition; proof that the disturbed patient belongs to that group—has the attributes that define his membership—may be required under whatever burden of proof policy dictates. Proof that he is correctly classified is clearly distinguishable from proof that he, as an individual,

67. We reject on logical grounds any tie between standard of proof and the level of prediction necessary to justify preventive detention or any lesser intrusion on the individual's liberty. We do not deny that standards of proof have a role in applying predictions of dangerousness: that role, which can be satisfied at whatever level of proof is desired, is to insure the correct categorization of the individual. The confusion of the standard of proof with levels of prediction has been the greatest barrier to a sensitive consideration of the jurisprudence of dangerousness in American courts. It is not only the courts, but social scientists as well who have made this error. *See* Monahan & Wexler, *A Definite Maybe: Proof and Probability in Civil Commitment*, 2 LAW & HUM. BEHAV. 37 (1978).

will injure himself or others; that he has a base expectancy rate of one in three and not of one in ten is susceptible of precise proof.

Assume, following *Addington,* that the risk of serious injury to another person, if the patient is not civilly committed, is one in three. Does *Addington's* constitutional requirement of clear and convincing evidence of dangerousness preclude the civil commitment of this patient? Clearly not. If it did, few indeed could be constitutionally committed. What *Addington* should be read to require is a larger degree of confidence than a preponderance of the evidence by the trier of facts, judge or jury, of the definition of the group. This higher degree of confidence would apply as well to proof of the base expectancy rate of violence for the group, which one hopes has been validly assessed and shown to be relatively stable, and to proof that this patient indeed falls within that group.

For the use of predictions of dangerousness in the criminal as opposed to mental health law, the problem is identical. Thus the elements of "dangerousness" capable of proof in the case of the hypothetical young offender, posed earlier, include not only his personal circumstances—the historical facts of his mother and his absent father, his truancy, his school and employment records, and his gang membership—but also his base expectancy rate of violence. The scientific work necessary to define a group and to assess its base expectancy rate of criminal violence within a given period has or has not been done, or has only been partially done. Its stability over time and in different regions has been tested, partially tested, or not tested.[68] If the facts of the future

68. This essay sets out our conception of an ideal—the requirements for the proper use of predictions of dangerousness—which we acknowledge cannot presently be attained. We leave for another time the extended development of a "practical" jurisprudence of dangerousness; see Section V below for interim "practical" suggestions. Courts faced with inadequate, imperfect, or incomplete evidence will have to decide whether to consider the evidence and what weight that evidence—whether from actuarial studies or clinical predictions—should be given. This problem will become more complex before it becomes less so, as new initial actuarial studies of relevant groups become available. Perhaps courts should recognize "good enough" science, for those times (almost always) when "perfect" science does not exist. Recognizing and utilizing good enough science would properly reward efforts at producing perfect science. It would also reward the principled use of predictions of dangerousness; judges could take the imperfections in the available studies and predictions into account when using such predictions.

criminal behavior of the group to which our hypothetical offender is said to belong have been found actuarially, then the question of his risk to the community is not properly related to the different burdens of proof of those actuarial facts. Proof of the base expectancy rate is not inherently more difficult than proof of the historical facts on which the rate was calculated. It makes little difference whether the burden of their proof is on a balance of probabilities, or by clear and convincing evidence, or beyond reasonable doubt. It is a mistake to confuse the sufficiency of proof of dangerousness with a decision whether to require proof beyond a reasonable doubt, or by clear and convincing evidence, or on a balance of probability. The decision by the Supreme Court in *Addington* has entrenched this error and has impeded rational analysis.

Addington figured prominently in the recent case of *Jones v. United States.*[69] The defendant, Michael Jones, had pleaded not guilty by reason of insanity to attempted petty larceny. The issue in the case was the constitutionality of committing Jones on grounds of future dangerousness to a term that might continue beyond the possible sentence for which he could have been held as a prisoner or for which he could have been held as a patient on grounds applicable to civil commitment.

Justice Powell, writing for the Court, found a continuing presumption both of mental illness and of dangerousness based on the commission of the criminal act for which Jones had pleaded not guilty by reason of insanity. The expiration of the "hypothetical" maximum sentence, had Jones been convicted of the criminal act in question, was held to be irrelevant. Regarding mental illness, Justice Powell wrote that "[i]t comports with common sense to conclude that someone whose mental illness was sufficient to lead him to commit a criminal act is likely to remain ill and in need of treatment."[70] As far as Jones' continued dangerousness, Justice Powell wrote that "[t]he fact that a person has been found, beyond a reasonable doubt, to have committed a criminal act certainly indicates dangerousness."[71] Thus, the Court held

69. 463 U.S. 354 (1983).

70. *Id.* at 366.

71. *Id.* at 364. One must wonder if there is any limit on the extent of this presumption of dangerousness other than the possibility that, at some point in his indefinite commitment, Jones may be able to prove that he is no longer mentally ill or dangerous.

that Jones could be detained even without finding by clear and convincing evidence that he remained dangerous and mentally ill. His dangerousness was presumed on the basis of the earlier plea.

The presumptions of continuing mental illness and dangerousness were found by the majority even though Jones had committed an offense that, in "common sense" terms, was nonviolent.[72] The Court suggested a definition of dangerousness that would remove all sense from the term; when attempted petty larceny of a jacket is included as a "dangerous" act, the type and extent of predicted harm justifying the use of predictions of dangerousness grows enormous. The willingness of the majority to presume dangerousness on the basis of the plea of insanity, especially in the absence of any supporting evidence of the defendant's continued dangerousness, is groundless—in short, *Jones* is a miscarriage of justice.[73]

Confusion about dangerousness is also evident in the opinion of the Court in *Barefoot v. Estelle.*[74] In *Barefoot,* psychiatric testimony of dangerousness was admitted under the Texas death penalty statute, which allows capital punishment under a finding that "there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society."[75] The decision by the same five-member majority as in *Jones* was delivered by Justice White, who began by stating that "[t]he suggestion that no psychiatrist's testimony may be presented with respect to a defendant's future dangerousness is somewhat like asking us to disinvent the wheel."[76] The Court then expressly approved Justice Stevens' statement in *Jurek* that "[a]ny sentencing authority must predict a convicted person's probable future conduct when it engages in the process of determining

72. Jones' criminal act carrying this powerful and continuing diagnostic consequence for five Justices of the Supreme Court was attempted petty larceny of a jacket.

73. *See* Monahan & Steadman, *Crime and Mental Disorder: An Epidemiological Approach,* in 4 CRIME & JUST. 145 (1983); MENTALLY DISORDERED OFFENDERS (1983). The same paradox noted earlier holds: the Court seems more willing to find or assume dangerousness when mental illness is involved, without further analysis, even though the civil committee or, here, the defendant who pleads not guilty by reason of insanity, is in theory less culpable than those convicted of violating the criminal law.

74. 463 U.S. 880 (1983).

75. *Id.* at 884 n.1 (citing TEX. CRIM. PROC. CODE ANN. § 37.071(b)(2) (Vernon 1981)).

76. *Id.* at 896.

what punishment to impose."[77]

The Court confused the question of whether predictions of dangerousness should be allowed at all with the entirely separate issue of what evidence of prediction—in other words, what types of predictions—should be admissible in evidence. Having recognized that predictions of dangerousness cannot be removed from the criminal law, the Court then seemed to assume that the testimony of psychiatrists regarding the defendant's dangerousness could not be excluded on any constitutional grounds, no matter how unfounded or prejudicial the specific testimony in any given case.[78]

Justice Blackmun, in dissent, correctly found the testimony of the *Barefoot* psychiatrists so prejudicial and overpersuasive that such evidence should not have been admitted. One psychiatrist for the State, Dr. Grigson, testified that he could "give *a medical opinion within reasonable psychiatric certainty* as to the psychological or psychiatric makeup of an individual."[79] Dr. Grigson thought he could predict that Barefoot "most certainly would" commit future acts of criminal violence, and claimed that the degree of probability that Barefoot would commit criminal acts of violence that would constitute a continuing threat to society was "*one hundred percent and absolute.*"[80] Dr. Holbrook, without the benefit of a personal interview or clinical examination of Barefoot, testified that it was "within [his] *capacity as a doctor of psychiatry* to predict the future dangerousness of an individual within a *reasonable medical certainty,*" and that "within reasonable psychiatric certainty" there was "a probability that . . . Thomas A. Barefoot . . . will commit criminal acts of violence in the future that would constitute a continuing threat to society."[81]

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77. *Id.* at 897 (quoting from *Jurek,* 428 U.S. 262, 275 (1976)).

78. Of course, there may be eighth amendment or fourteenth amendment due process objections to the admission of such highly prejudicial "expert" testimony regarding such a serious determination. *See Barefoot,* 463 U.S. at 916, 923-25 (Blackmun, J., dissenting). The constitutional limits on federal review of state statutes and testimony given under state statutes may have raised a smaller constitutional hurdle than would a federal statute, but we do not see how the testimony actually given by Grigson and Holbrook in *Barefoot,* at least, could get over even the most deferential constitutional hurdle.

79. *Id.* at 918.

80. *Id.* at 919 (emphasis in original).

81. *Id.* at 919, 920 (emphasis in original). The record indicates that Barefoot did not fit into the category of people so exceptional as to overcome our principles of the just use of predictions of dangerousness. Barefoot had not previously been convicted of a violent offense, but had been

Such statements, impossible of proof and rejected by the American Psychiatric Association,[82] rely for their probative force on the title attached to the witnesses.[83]

In *California v. Ramos*,[84] the majority incorrectly analogized predictions of dangerousness, such as those upheld in *Jurek v. Texas*[85] and *Barefoot*, to California's "Briggs instruction," which requires that the trial judge in a death case inform the jury that a sentence of life imprisonment without the possibility of parole may be commuted by the governor to a sentence that includes the possibility of parole.[86]

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convicted of drug offenses and possession of an unregistered firearm. The conviction leading to the capital sentence was for the killing of a police officer. Barefoot was executed in late 1984. The issue whether predictions of dangerousness could be made based on a hypothetical case, without benefit of any actual clinical probing, is spurious. Clinical predictions of dangerousness naturally lose much of their probative force without personal examination, since the psychiatrist should be making a judgment based on all he or she knows or has observed about the individual. In our view, clinical predictions should never be used in the criminal law when stakes are this high because they are inherently suspect and untestable. On the other hand, an actuarial prediction could be made based on a hypothetical case in which all of the relevant elements had been proven at whatever level of proof is required.

82. The *Barefoot* brief for the American Psychiatric Association as amicus curiae concluded that:

> The forecast of future violent conduct on the part of a defendant in a capital case is, at bottom, a lay determination, not an expert psychiatric determination. To the extent such predictions have any validity, they can only be made on the basis of essentially actuarial data to which psychiatrists, *qua* psychiatrists, can bring no special interpretive skills. On the other hand, the use of psychiatric testimony on this issue causes serious prejudice to the defendant. By dressing up the actuarial data with an "expert" opinion, the psychiatrist's testimony is likely to receive undue weight. In addition, it permits the jury to avoid the difficult actuarial questions by seeking refuge in a medical diagnosis that provides a false aura of certainty. For these reasons, psychiatric testimony of future dangerousness impermissibly distorts the factfinding process in capital cases.

Brief of Amicus Curiae, American Psychiatric Association at 9, Barefoot v. Estelle, 463 U.S. 880 (1983).

83. Restraints on such testimony by members of the psychiatric and psychological professions have been suggested as well. *See, e.g.*, Ewing, *"Dr. Death" and the Case for an Ethical Ban on Psychiatric and Psychological Predictions of Dangerousness in Capital Sentencing Proceedings*, 8 AM. J. CRIMINOLOGY & MED. 407 (1983).

84. 463 U.S. 992 (1983).

85. 428 U.S. 262 (1976).

86. The Court observed that:

> The Briggs Instruction invites the jury to assess whether the de-

Ramos concerned the prediction of the future governor's behavior rather than the prediction of the offender's future behavior. A commutation of a sentence by a governor would be a near-random event based wholly on individual factors which are essentially unpredictable (e.g., new evidence showing that the defendant is innocent; or a highly public response to a trial; or as an act of random but no doubt carefully chosen clemency, as a sign of forgiveness and compassion on the part of the executive). In other words, the probability of such an occurrence is so near to zero and the factors so unrelated to any prediction of *group* behavior that the majority's analogy to predictions of dangerousness is indeed an "intellectual sleight of hand."[87] The majority seemed to think that dangerousness could be evaluated by the trier on an intuitive, unstructured, and individualized basis, as shown by the misleading reference to "lay" testimony.[88]

Thus, the Court has not carefully considered the meaning of predictions of dangerousness. Such consideration has been avoided because of the confusion with burdens of proof so evident in *Addington*, obscured by groundless presumptions in *Jones*, and ignored by the majority in *Barefoot*, in which admittedly meaningless and overpersuasive accusations of fu-

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> fendant is someone whose probable future behavior makes it undesirable that he be permitted to return to society. Like [the use of predictions of dangerousness in *Jurek* and *Barefoot*] the Briggs Instruction focuses the jury on the defendant's probable future dangerousness. The approval in *Jurek* of explicit consideration of this factor in the capital sentencing decision defeats [the] contention that, because of the speculativeness involved, the State of California may not constitutionally permit consideration *of commutation*.

Ramos, 463 U.S. at 103 S.Ct. 3446, 3454 (emphasis added).

87. *Id.* at 103 S. Ct. at 3467 (Blackmun, J., dissenting). On remand from the Supreme Court, the California Supreme Court held the Briggs instruction unconstitutional under the California constitution "because it is seriously and prejudicially misleading and because it invites the jury to be influenced by speculative and improper considerations." People v. Ramos, 37 Cal.3d 136, 153, 689 P.2d 430, 439-40, 207 Cal. Rptr. 800, 809-10 (1984), *cert. denied*, 105 S. Ct. 2367 (1985). *Ramos* suggests the important and independent role the state courts can play in developing a jurisprudence of dangerousness.

88. Justice Blackmun appears to be correct on the use of the term "lay" testimony in *Jurek* and Estelle v. Smith, 451 U.S. 454, 472-73 (1981). *See Barefoot*, 463 U.S. at 936-38 (Blackmun, J., dissenting). It does not mean testimony by persons off the street, but testimony by social scientists armed with statistical predictions.

ture dangerousness by psychiatrists were allowed to justify the imposition of capital punishment where a finding of likely future dangerousness was required by statute.[89]

V. The Proper Use of Predictions

In this part, we offer three principles for the just invocation of predictions of dangerousness under the criminal law. We assume, for this purpose, validly established base expectancy rates of dangerousness for defined groups of offenders, though we recognize that such an assumption tends to exaggerate present knowledge. We shall present our three principles, state what we mean by them, and then offer some examples of how they might be applied, with justice, in various areas of the criminal law.

Our first submission concerning the proper use of predictions of dangerousness under the aegis of the criminal law—as distinct from the mental health law or immigration law or the law relating to quarantine or to spies—is this:

> Punishment should not be imposed, nor the term of punishment extended, by virtue of a prediction of dangerousness, beyond that which would be justified as a deserved punishment independently of that prediction.

It will be noted that this submission speaks both to the assumption of predictive power and to the limitation of that power. Floud and Young, in their book on this subject, fail to make this helpful distinction. They consider, as our first principle does, the initial point at which such predictions can justly be made, though they lapse into overstatement, but they do not carefully isolate the proper limitations on the application of such predictions thereafter. They write of the "dangerousness of dangerousness" and are perceptive of the risk of a "slippery slope" to "universal preventive confinement," where predictive judgments would be used to incapacitate individuals predicted to be dangerous whether or not

89. That the statute in Texas may have indicated unrealistic assumptions by the legislature about the present ability to predict future dangerousness, and thus may have suggested to the psychiatrists that they testify in the terms they did, does not absolve the error in placing such testimony before a jury. The legislature may have demanded an impossible finding (in trying to satisfy the current constitutional doctrine regarding the death penalty) in which case our analysis would not apply, but we later suggest a possible interpretation of the Texas statute which would give it a sensible and operational meaning.

they had committed an offense.[90] They argue that a "right to be presumed harmless . . ., like the right to be presumed innocent, is fundamental to a free society."[91] The rhetoric is overblown, but the point has merit, as does their conclusion that a "man must justly forfeit his right to be presumed innocent before his right to be presumed harmless can be brought into question."[92]

We would agree with this conclusion, but with this important qualification. Powers under the criminal law are sometimes properly and necessarily exercised prior to findings of guilt by a judicial authority—powers of arrest, of bail, of search and seizure, and so on.[93] We agree with the thrust of the point made by Floud and Young but would modify it to this extent: a prediction of dangerousness can never alone justify the invocation of authority over the individual under the criminal law that would not exist without such a prediction.[94]

Our first principle recognizes the distinction between "customary" and "extraordinary" uses of predictions of dangerousness. Customary uses are those falling within authority previously recognized. In these cases, the limitation on personal liberty is justified without reference to predictions of dangerousness. Predictions are used only to distribute punishment. Extraordinary uses are those which rely on predictions of dangerousness to justify a restriction on liberty—such as a sentence beyond what a judge could otherwise order, or the capital sentence allowed in *Barefoot*. Our first principle allows only customary uses.[95]

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90. J. FLOUD & W. YOUNG, *supra* note 20, at 40.

91. *Id.* at 44.

92. *Id.* at 46.

93. The reality and necessity of predictions as appropriate guides to the exercise of discretion is most obvious in these circumstances. In deciding whether to arrest in a situation of matrimonial dispute, the police officer would be failing in his duty were he not to take into account his best estimate of the risk of injury to the wife if he does not make an arrest; in deciding whether to indict, and for what, the prosecutor will and should consider the danger to others if he does not go forward with a charge.

94. Floud and Young would even further confine the application of predictions of dangerousness, which they suggest should not be applied to first offenders. Again, we have to broaden the base. A sensitive means of distinguishing between first offenders (especially those convicted of serious crimes) who present a high risk of future serious criminality and those who do not is of great practical importance if it can be done within proper ethical limits.

95. In fact, the line between customary and exceptional uses is not always clear. Newly established programs invoking new state powers and

Our second submission is:

> Provided the previous limitation is respected, predictions of dangerousness may properly influence sentencing decisions and other decisions under the criminal law.

The first submission prevents utilitarian values from justifying the exercise of state authority over individuals merely because of a prediction, here assumed to be valid and stable, of their membership in a group with a high risk of future dangerousness. To this extent, the first submission is deontological, expressing adherence to values enshrined in the criminal law that seek to strike a just balance between individual autonomy and state authority.

The second submission moves into the utilitarian. It suggests that, if there are otherwise existing justifications for the exercise of state authority over the individual, it is entirely proper to take into account his membership in such a group. And this leads to the third and limiting principle, which defines the jurisprudence we offer in this field—that of the "limiting retributivist."

The third principle is:

> The base expectancy rate of violence for the criminal predicted as dangerous must be shown by reliable evidence to be substantially higher than the base expectancy rate of another criminal with a closely similar criminal record and with a conviction of a closely similar crime but not predicted as unusually dangerous, before the greater dangerousness of the former may be relied on to intensify or extended his punishment.

Base expectancy rates for appropriately targeted groups provide the analytical key to policy decisions about the uses of predictions in various contexts. Only by comparing the predictions for individuals within relevant groups to the base expectancy rate of violence for that group can the decision be made about whether the use of the prediction is proper in controlling the individual. Predictions of relative dangerous-

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violating fundamental principles could, under the definitions offered here, mistakenly be labelled "customary." A similar mislabelling effect would occur for the new exercise of state power well within the borders of preexisting activities and principles. A recognition of fundamental constitutional and liberty principles, such as the presumption of innocence in our criminal justice system, and the constitutional guarantee of procedural due process, helps to define the proper scope of customary and exceptional uses of predictions of dangerousness.

ness can be used to identify individuals who are particularly dangerous or non-dangerous within a given group.[96]

The groups for which predictions of dangerousness should be used as a tool to distinguish among their members must be chosen with care. Groups which are too large or small would make the effort to distinguish among the members meaningless. A choice must be made about which factors define the base—the like characteristics of the members—and which factors should then be used to distinguish the members within the group.

In the paradigm context of sentencing, the first variable necessary to define target groups is the crime for which the defendant has been convicted. No increase in justice can be gained from comparing an individual who has committed murder with another who has committed petty larceny. No legislature would prescribe the same range of punishments for both of them, and no judge would place them side by side in making a sentencing determination.

The second variable defining the appropriate groups is prior record. The judge often looks to prior record, after the act, in making the initial sentencing determination. The legislature, in imagining the best and worst cases and setting sentencing range,[97] considers the novice and the career criminal as a justification for a range of possible punishments. The defining retributive rationale—the retribution instinct—responds differently to widely different records.

It is our general submission that these three principles enunciate a jurisprudence of predictions of dangerousness that would achieve both individual justice and better community protection than at present.

Our view depends on the recognition that there is a range of just punishments for a given offense; that we lack the moral calipers to say with precision of a given punishment, "That was a just punishment." All we can say, with precision, is: "As we know our community and its values, that does not seem an unjust punishment." It therefore seems entirely proper to us, within a range of not unjust punishments, to take account of different levels of dangerousness of those

96. The relative prediction may be at a low absolute level of accuracy, but it might nonetheless validly distinguish between the overall threat posed by individuals in the two sub-groups.

97. The legislature's decision may also be characterized as the resolution of arguments between legislators over the harshest and mildest acceptable punishments for each offense.

to be punished; but the concept of the deserved, or rather the not undeserved, punishment properly limits the range within which utilitarian values may operate.

The injustice of a punishment, assuming proper proof of guilt, is thus defined in part deontologically, in limited retributivist terms and not solely in utilitarian terms. The upper and lower limits of "deserved" punishment set the range within which utilitarian values, including values of mercy and human understanding, may properly fix the punishment to be imposed.

There is no way to prove absolutely that act and prior record are the essential elements in choosing the target groups. But these elements are not chosen from thin air. All modern sentencing commissions to date have considered act and record to be the key elements in laying out a grid—in other words, in defining the retributive boundaries for the sentencing choices.[98] Act and record are also a fair description of what judges consider in sentencing. Finally, we cannot think of what other principles might be used to identify appropriate target groups. The choice of these factors is a reflection of both practice and common sense.

There is often a range of "not-unjust" punishments, measured in relation to the gravity of the offense and the offender's criminal record. And when punishment systems fail to appreciate the need for such a range and set up mandatory sentences, as occasionally happens, they always get into trouble. Such systems either are circumvented, or achieve gross injustice, or both. Punishments and a scale of just punishments should always allow for discretion to be exercised, under proper legislative guidance, by the judicial officer of the state. This position recognizes the difference between the justification for punishment and the distribution of punishments.[99]

Justifying the application of predictions of dangerousness to an individual within this range of just punishments also helps determine the appropriate group in comparison with which his relative dangerousness should be determined. This is a group with similar criminal records, who have committed crimes of similar gravity to that of the offender being sentenced, since universally these are the two leading determinants of what are seen as just punishments. Hence the struc-

98. *See* Tonry, *Sentencing Commissions and Sentencing Guidelines: The Second Generation*, in SENTENCING REFORM IN ENGLAND (1986).

99. *See* H.L.A. HART, *supra* note 42.

ture of our three principles, allowing room for predictions in sentencing within the concept of the not unjust sentence, and using gravity of crime and criminal record to determine the comparison group against which an offender's higher base expectancy rate of violence must be established. Once criminal record and severity of the current offense are included, the definition of groups with higher base expectancy rates than those with similar crimes and similar criminal records becomes very much more difficult of proof—but it is a prerequisite to justice in sentencing.

It may help give substance to these submissions to suggest how our theory of just predictions of dangerousness might operate in various areas of the criminal law of particular present concern. Overall, the principles we offer would have a dramatically restrictive effect on the acceptability of predictions of dangerousness in the criminal law, but our principles would also allow room for the future development of an enlarged capacity to apply such predictions with justice.

Let us try to give operational perspective to these principles by considering their application in four areas of the criminal law: first, in relation to sentencing under such systems as that first established in Minnesota, further developed in Pennsylvania, and now finding increasing acceptance in other states and also under other systems of sentencing;[100] second, in relation to the problem of early release under pressure of prison overcrowding; third, in relation to the problem of release on bail or on the accused's own recognizance; and, finally, in relation to the difficult problem that confronted the Supreme Court in *Barefoot v. Estelle*. In none of these areas will we do more than suggest the basis of a just invocation of predictions of dangerousness.

A. *Sentencing: Minnesota and Pennsylvania and Other Systems*

As we have seen, predictions of dangerousness are in fact taken into account in sentencing, and the Supreme Court has expressly approved that practice. Given discretion in sentencing, that result is inevitable. Nevertheless, how should it properly operate? Let us assume a Minnesota/Pennsylvania-type sentencing system by which the gravity of the offense and the convicted person's criminal record define both

100. *See* MINNESOTA SENTENCING GUIDELINES COMMISSION, REPORT TO THE LEGISLATURE (1980); PENNSYLVANIA COMMISSION ON SENTENCING, REPORT TO THE LEGISLATURE (1982); WASHINGTON SENTENCING GUIDELINES COMMISSION, REPORT TO THE LEGISLATURE (1983).

whether he should be imprisoned and, if so, the range of months within which the term should be set. These guidelines bind or, in Pennsylvania, guide the sentencing judge unless he wishes to impose a more lenient or more severe sentence than the guidelines provide (of course within his statutory powers), in which case he must give reasons for his "departure" from the guidelines.

Our principles would not justify a "departure" on the grounds of the offender's predicted dangerousness; they would justify a judge in setting a sentence at the top of the range set by the guidelines,[101] provided the criminal being sentenced had been shown on a valid basis to have a higher base expectancy rate of dangerousness than other criminals falling within those same guidelines. Let us put the matter colloquially for those who are acquainted with the "boxes" of the Minnesota/Pennsylvania-type sentencing system: the boxes would both set the limits and define the comparison group for the extension of punishment on the basis of an offender's predicted greater dangerousness.[102]

The Minnesota/Pennsylvania system of sentencing narrows the discretion of the judge. How should our principles operate when the upper limit on the judge's sentencing power is the maximum provided by statute? Presumably, that maximum is statutorily intended to apply to the "worst case—worst record" offender. We are not suggesting, in such a situation, that predictions of dangerousness justify increments of sentencing up to that maximum. The operating maximum in such a case must be what the judge would think not undeserved for such an offender as he has before him, and with a similar record (those factors would fix his estimate of the not-undeserved maximum for such an offender, which would set the upper limit of an increment of sentence on the basis of dangerousness). The advantage of considering the application of our principles in a Minnesota/Pennsylvania-type sentencing system is that such a system gives some operative and ascertainable meaning to the upper limit of desert in the individual case, which other sentencing systems tend to conceal.

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101. A series of Minnesota cases have made clear that dangerousness cannot justify a durational departure by a judge on the grounds that the legislature specifically accounted for future dangerousness in setting the sentencing guidelines. *See, e.g.*, Minnesota v. Dietz, 344 N.W.2d 386 (Minn. 1984); State v. Ott, 341 N.W.2d 883 (Minn. 1984); State v. Gardner, 328 N.W.2d 159 (Minn. 1983).

102. *See* MINN. STAT. ANN. § 244 app. at 301 (West Supp. 1986).

B. *Early Release*

Assume a state prison system so crowded that, in response to legislatively approved powers, some prisoners must be released prior to the termination of their sentences, less time off for good behavior, and apart from the state's parole system. This situation has recently occurred in several states, sometimes under legislative authority, sometimes pursuant to gubernatorial powers of clemency, and sometimes under court order.

How are prisoners to be selected for early release? Should the state release all those with only, say, three months to serve, or four months, or whatever period will produce the necessary reduction of population? Early release is never carried out in that way. Invariably, an effort is made to select a group with a lower rate of likely dangerousness, particularly for the period during which they will now be at large when they would otherwise have been in custody. The political pressures to this end are compelling, and if it be assumed that the sentences on all were just, then no injustice is caused by extending this clemency to a few.[103] That this involves predictions of dangerousness is obvious, and they are exactly the predictions of dangerousness that have been used by those who have developed and applied parole prediction tables for several decades—efforts to assess actuarially the likelihood that various categories of prisoners will commit crimes during their parole periods. It will be seen that our three principles apply here.[104]

We are not, of course, seeking to justify the parole system or current practices of early release. Rather, if a parole system, giving some discretion to the releasing authority, is itself a just system, then predictions of dangerousness, if valid and based on the comparison groups we have suggested, are ethically justifiable. And in the case of early release, the categories for the comparison groups and for the selection are also obvious. Some prisoners convicted of particularly heinous crimes, whose early release would stir public anxiety, will be excluded, and the remaining and proper comparison

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103. *But see Matthew* 20:1-15; *Luke* 14:15-24.

104. To the extent that predictions of dangerousness retain less validity at the far end of a prison term, distant from the critical acts which supported any original prediction, given the problems of fairness in distributing early release among otherwise noncomparable inmates, and given the paucity of data, the release decision really becomes, and should be recognized as, a wholly political decision.

group will be those with a defined time to serve. Within that group, base expectancy rates of dangerousness may justly be considered.

C. *Bail and Release*

Let us pursue another example, one that both severely tests our principles and reveals their potential for application outside the area of sentencing on which we have concentrated. The questions of bail or release on the accused's own recognizance, of appearance for trial and of crimes committed during such release, are of great public concern and have generated various proposals for preventive detention prior to trial. Such proposals all involve, in one way or another, efforts to predict those either less likely to appear for trial or more likely to commit a crime if left at large pending trial.

We wish to avoid becoming involved in the heated constitutional and policy conflicts attending those bail reform proposals; they are serious issues, but our concern is narrower. If release on bail is to be denied to those having a higher base expectancy rate of not appearing or of committing a crime prior to trial, what are the limiting principles, akin to the concept of a deserved punishment, that can set bounds to the imposition of these disadvantages on our unknown arrested "false positives?"

None of the arrested but untried deserve punishment in the same sense that the convicted offender being sentenced, or the sentenced offender being considered for early release, have a deserved, applicable maximum sanction. Can "probable cause" for the arrest substitute for a "deserved maximum punishment" as a limiting principle? It would seem not. No punishment is "deserved" by the arrested person, whether or not there is probable cause for the arrest. But the analogy is close in this sense: predictions of dangerousness properly function only within discretions otherwise lawfully justified.

Current bail reform proposals are restrictive of liberty, but let us start with the converse case to explain this point. Consider a bail reform proposal that suggested that release pending trial of those charged with capital crimes should cease to be governed by an unfettered judicial discretion, but should be made subject to defined prediction processes by which only those accused of capital crimes, and with a stated high base expectancy rate of flight, should be detained, the predictive criteria being stated. None would, we suggest, object on grounds of civil liberty that the "false positives" with

high base expectancy rates would, as a consequence, not be at large pending trial while others accused of capital crimes would be free on bail. The point is that the detention of all is justified on grounds other than their predicted dangerousness and is not constitutionally objectionable; hence, neither is the detention of a few, provided the base expectancy rates are validly established and proved. Here the greater does include the lesser.

Now consider the reverse and more likely "reform." Bail may be denied to those who, for example, have previously jumped bail or committed a crime while on bail, or are charged with a crime of serious personal violence and had previously been convicted of such a crime, or have a record of drug abuse. If it is legislatively accepted and passes constitutional muster, no matter what its wisdom as social policy, it seems to us that it is entirely proper to apply here exactly the same principles for exercising discretion based on predictions of dangerousness as in the sentencing situation, the early release situation, or other areas of the criminal law where powers are lawfully taken over defined groups of citizens, the exercise of those powers being modulated by predictions of dangerousness.

By contrast, and to drive home the point, we would regard as wholly unprincipled a bail "reform" statute which provided that arrested persons with a base expectancy rate of, say, one in three of not appearing for trial or one in four of committing a crime of a certain gravity while at large pending trial, may be denied bail. What it comes to is that the legislature must, within its constitutional powers, address the reality of false positives for the group; that difficult balance cannot be left to the judge in the individual case.

As conviction of a crime is the nonutilitarian justification for the application of the prediction of dangerousness in sentencing, so the existence of probable cause for an arrest and of legislative authority to deny bail—or to set it beyond the reach of the arrested person—are the preconditions for consideration of the likely dangerousness of the arrested person in this situation. Who will then form the comparison group against which one arrested person's higher base expectancy rate of dangerousness justifies his detention? Other persons arrested for a crime of similar gravity and with similar records.

D. *Barefoot v. Estelle*

As our fourth example of how the principles we offer in this essay would properly limit, and yet allow room for reliance on, predictions of dangerousness, let us build on the case of *Barefoot v. Estelle*, in which the testimony of two psychiatrists was, in our view, improperly allowed to go to the jury on the prisoner's future dangerousness and therefore fitness for capital punishment. *Barefoot* provides a paradigm for the application of our offered principles.

The Texas psychiatrists testified as expert witnesses that the murderer, Barefoot, was a sociopath (a meaningless though profoundly pejorative diagnosis) and that he was highly likely to be a danger to the community if released and to other prisoners if detained. The applicable Texas statute authorized Barefoot's execution if "there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society."[105]

If our principles are correct, the two psychiatrists should have been asked something like the following: If Barefoot's murder is compared with murders of similar gravity by men with a similar record to Barefoot's, does the fact that you diagnose him as a sociopath mean, when added to the other diagnostic information you have about him, that he has a higher likelihood than those other similar murderers with similar records of being injurious to others if not executed? The point is not that Barefoot has a high likelihood of injuring others in the future—we will assume that. What we have to know is whether he has a *higher* likelihood than those with whom we are comparing him. Otherwise we must execute them all or not execute Barefoot. He must be distinguished validly from them by his greater dangerousness if we are with justice to select him for his greater punishment. We must have a comparison group against whom to establish his greater dangerousness. Who should constitute that comparison group? They must be murderers of similar record, whose killings were of similar gravity, whom you do not call sociopaths and do not otherwise selectively diagnose. Very well, doctors, give us the evidence on which you based this diagnostic category "sociopath" and found that this sociopath, Barefoot, has a higher base expectancy rate than those

105. It is not our purpose to defend such a statute—far from it. Rather, our purpose is to suggest how predictions of dangerousness can be applied, with justice, within such a statute, reluctantly, for the moment, assuming its ethical validity.

others.

Of course, there is no such evidence. But that, we submit, is the proper thrust of the inquiry. Only with such evidence could one defend a selection under which one might, with justice, increase a punishment by virtue of a prediction of future violent behavior—and not otherwise.

VI. CONCLUSIONS

Our essay is somewhat utopian. We started by recognizing the pervasive use of predictions of dangerousness, implicit and explicit, in the criminal law. We concluded by enunciating principles highly restrictive of the use of such predictions. We are well aware that it is our principles and not practice that will fall in this conflict.

That we are often compelled to make predictions leading to the extension of punishment, or to leniency, though guided by inadequate information—that our prediction capabilities are poor—is a regrettable truth.[106] Many important decisions have to be taken on the basis of inadequate knowledge, and such is the case with predictions of dangerousness in the application of both criminal and mental health law. This does not mean that we withdraw our submissions; rather, we recognize that the path to a responsible jurisprudence of prediction under the criminal law is neither short nor likely to be of easy passage. For the time being, judgments must be made (1) in light of these principles; (2) in light of available studies and evidence identifying both positive and negative predictive factors; (3) in open recognition of generally limited predictive abilities; and (4) with the realization that intuition is often wrong. Finally, (5) the term "dangerousness" must be more carefully used. The type of predicted harm underlying a prediction of dangerousness must be kept within some principled limits, and not allowed to extend to meaningless or open-ended descriptions of harm.[107]

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106. The cost of research and data collection raises additional problems. In some cases, the return in increased justice from the desired application may not be worth the cost of generating sufficiently reliable and testable data.

107. Dangerousness should not be used as a synonym for recidivism, vileness in the particular act, general disrespect for law, or a criminal lifestyle. *See, e.g.*, United States v. Jarrett, 705 F.2d 198 (7th Cir. 1983), *cert. denied*, 465 U.S. 1004 (1984) (criminal life-style) (interpreting the federal Dangerous Special Offender Statute); United States v. Hondo, 575 F. Supp. 628 (D. Minn. 1983) (general disrespect for law); Sundeberg v.

The issues surrounding the use of predictions identified in this essay, such as the concern with the presumption of innocence, can often be stated in either "legal" or "moral" terms. More generally, they can be stated as issues of justice. The central framework for the resolution of these issues rests on the recognition that the use of statistical predictions must often be compared with the current use of implicit predictions of future behavior, with all the injustice of decisions made for hidden reasons, unacceptable reasons, or for no reason at all. The real world cannot be ignored, and therefore it is wrong to compare the difficulties recognized in the use of statistical predictions with a hypothetical world of perfect knowledge about human behavior.

The other general point which must be recognized to face the moral issues is that these issues cannot be resolved by resort to legal principle or to mere numbers. The initial determination as to when and how predictions should be used is necessarily a political and moral choice. Only after this choice has been made can the legal institutions, and limited predictive abilities, be brought into use in any particular situation. That a prediction is at a high or low level, or that the harm predicted is severe or minor, are only relevant after the decision has been made as to what likelihood of harm, and what type of harm, should be used to regulate individual liberty, or to properly distribute, within limited ranges, the tremendous punitive powers of the state.

As is so often the case with problems as they arise within the legal system, procedural and evidentiary aspects emerge as central in importance to a just use of predictions of dangerousness. We have argued that clinical predictions of dangerousness unsupported by actuarial studies should rarely be relied on. It is shocking that the Supreme Court relies on such statements absent validated statistical support. Clinical judgments firmly grounded on well-established base expectancy rates are a precondition, rarely fulfilled, to the just invocation of predictions of dangerousness as a ground for intensifying punishment. Our theory provides a rational process for considering the just use of predictions. Unless these principles or something similar are followed, the present movement toward the overuse of predictions of dangerousness will be a threat to justice.

Alaska, 652 P.2d 113 (Alaska Ct. App. 1982) (recidivism); Quintana v. Commonwealth, 224 Va. 127, 295 S.E.2d 643 (1982), *reh'g denied*, 461 U.S. 940 (1983) (vileness in the act).

Developing a coherent and practical jurisprudence of dangerousness will not be an easy task. Difficult issues have been avoided as courts have hidden behind the wall of standards of proof and behind the white coats of psychiatrists and psychologists. Yet predictions of dangerousness have been applied implicitly and explicitly by judges and parole boards, hospital administrators and psychologists, police and correctional officers, victims of crimes and prosecutors of criminals. Scholarship and legal analyses have failed sufficiently to recognize the danger of this untested and intuitive use of our poor capacity to predict violent future behavior. While our criminal justice and mental health systems cannot function without the concept of dangerousness, people in these systems must always keep in mind that there is a danger both to individual liberty and to effective crime control in the concept of dangerousness.