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## From the Ne'er-Do-Well to the Criminal History Category: The Refinement of the Actuarial Model in Criminal Law

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# FROM THE NE'ER-DO-WELL TO THE CRIMINAL HISTORY CATEGORY: THE REFINEMENT OF THE ACTUARIAL MODEL IN CRIMINAL LAW

BERNARD E. HARCOURT\*

## I

### INTRODUCTION

Criminal law in the United States experienced radical change during the course of the twentieth century. The dawn of the century ushered in an era of individualization of punishment. Drawing on the new science of positive criminology, legal scholars called for diagnosis of the causes of delinquency and for imposition of individualized courses of remedial treatment specifically adapted to these diagnoses. States gradually developed indeterminate sentencing schemes that gave corrections administrators and parole boards wide discretion over treatment and release decisions, and by 1970 every state in the country and the federal government had adopted a system of indeterminate sentencing.<sup>1</sup> At the close of the century, the contrast could hardly have been greater. Practically every state had repudiated in some way indeterminate sentencing and imposed significant, in some cases complete, constraints on the discretion of sentencing judges and parole boards. In many states, parole boards were simply abolished. The period was marked by a new era of uniformity and consistency in sentencing.<sup>2</sup>

The twentieth century also witnessed radical change in its prison populations. The number of persons incarcerated in the United States increased dramatically during the last decades of the century, and the racial imbalance of the incarcerated population increased steadily. By 2001, the United States incarcerated roughly two million men and women in state and federal prisons and jails,<sup>3</sup> and, although African Americans represent approximately 13% of the

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1. *See infra* Part II.A.

2. *See infra* Part II.B.

3. U.S. DEP'T OF JUSTICE, BUREAU OF JUSTICE STATS, SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS 2000 (2001) available at <http://www.albany.edu/sourcebook/> [hereinafter SOURCEBOOK]

general population, African-American men and women counted for 46.3% of prisoners under state and federal jurisdiction by the year 2000.<sup>4</sup>

Legal scholars, economists, political and social theorists have offered numerous interpretations to help explain these significant structural transformations. Some claim that the changes were a rational response to the increasing crime rates that began in the 1960s.<sup>5</sup> Others contend that they were the product of distorted perceptions of crime fueled primarily by, or inflamed by, media attention and political initiative.<sup>6</sup> Some claim that they were a response to excessive judicial and prosecutorial discretion, discretion that often served to mask racial discrimination.<sup>7</sup> Still others claim that they reflect racial animus expressed primarily through the War on Drugs and the targeting of inner-city black communities.<sup>8</sup> Some suggest that they are the product of a fundamental

(Table 6.1 and 6.27); U.S. DEP'T OF JUSTICE, BUREAU OF JUSTICE STATS, PRISONERS IN 2001 (2002), available at <http://www.ojp.usdoj.gov/bjs/abstract/p01.html> [hereinafter PRISONERS IN 2001].

4. SOURCEBOOK, *supra* note 3, at 488 (Table 6.2); PRISONERS IN 2001, *supra* note 3, at 11.

5. See generally William Spelman, *The Limited Importance of Prison Expansion*, in THE CRIME DROP IN AMERICA 97, 123-125 (Alfred Blumstein & Joel Wallman eds., 2000) (reviewing the literature on the incarceration-crime hypothesis and concluding that the prison build-up and increased incarceration were responsible for approximately one quarter of the crime drop). Several studies found that increased incarceration reduced crime. See, e.g., Steven D. Levitt, *The Effect of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Litigation*, 111 Q. J. OF ECON. 319, 348 (1996) ("In the absence of strong alternatives to imprisonment at the present time, however, increased reliance on incarceration appears to have been, and continue[s] to be, an effective approach to reducing crime"); Patrick A. Langan, *Between Prison and Probation: Intermediate Sanctions*, SCIENCE, May 6, 1994, at 792-93 ("Tripling the prison population from 1975 to 1989 potentially reduced reported and unreported violent crime by 10 to 15% below what it would have been, thereby potentially preventing a conservatively estimated 390,000 murders, rapes, robberies, and aggravated assaults in 1989 alone.").

6. See, e.g., KATHERINE BECKETT, MAKING CRIME PAY: LAW AND ORDER IN CONTEMPORARY AMERICAN POLITICS 4-5, 14-27 (1997) [hereinafter BECKETT, MAKING CRIME PAY] (suggesting that public concern about crime was the product of media attention and political anti-crime initiatives, rather than crime rates, and that the resulting crackdown on crime was a socially and politically engineered response); KATHLYN TAYLOR GAUBATZ, CRIME IN THE PUBLIC MIND 5-8 (1995) (suggesting that public opinion, fueled by media exaggeration, became increasingly tough on crime despite steady crime rates since 1973, and that politicians and policy makers escalated the get-tough rhetoric and responded with a crackdown on crime); MIKE A. MALES, FRAMING YOUTH: TEN MYTHS ABOUT THE NEXT GENERATION (1999) (arguing that the media and academics have produced a misleading picture of contemporary youths that has fueled punitive responses). Critics of the incarceration-crime hypothesis generally focus on the National Crime Victimization Survey data, rather than the FBI's Uniform Crime Reports. See, e.g., GAUBATZ, *supra*, at 8 ("In the years since 1973, when reliable data on national victimization rates began to be collected annually, rates of violent crime have been held remarkably steady, while rates of both household crime and personal theft have dropped significantly.").

7. See, e.g., Stephen Breyer, *The Federal Sentencing Guidelines and the Key Compromises Upon Which They Rest*, 17 HOFSTRA L. REV. 1, 4-6 (1988) (discussing Congress' central purposes in enacting the federal sentencing guidelines, including reducing racial and gender disparities associated with excessive sentencing discretion). See generally MICHAEL TONRY, SENTENCING MATTERS 54-58 (1996) [hereinafter TONRY, SENTENCING] (discussing claims of racial disparities in state sentencing schemes such as Minnesota, Washington, and Oregon); James M. Anderson et al., *Measuring Interjudge Sentencing Disparity: Before and After the Federal Sentencing Guidelines*, 42 J.L. & ECON. 271, 275-77 n.20 (1999) (discussing how claims of racial disparities in sentencing helped fuel the federal sentencing guidelines).

8. See, e.g., JEROME G. MILLER, SEARCH AND DESTROY: AFRICAN-AMERICAN MALES IN THE CRIMINAL JUSTICE SYSTEM, 62-88 (1996) (suggesting that the War on Drugs fueled the explosion in the carceral population and exacerbated racial bias already present in the criminal justice system); THE REAL WAR ON CRIME: THE REPORT OF THE NATIONAL CRIMINAL JUSTICE COMMISSION 107-24

shift in our democracy from a social welfare to a penal state—a state that manages the underclass no longer through welfare programs but by means of incarceration.<sup>9</sup> And others contend that the changes reflect a shift in the final decades of the twentieth century toward a new mode of bureaucratic management of crime—a new probabilistic or actuarial *episteme*—involving a style of thought that emphasized aggregation, probabilities, and risk calculation instead of individualized determination.<sup>10</sup>

In this essay, I explore another possible interpretation. It is an interpretation that focuses on the will to know the criminal, on the desire to predict his criminality. It is an interpretation that pays close attention to the deep drive to operationalize and model future criminal activity in the most parsimonious way, to the will to better predict the probability of criminality, to the search for more efficient responses to the expected occurrence of crime. Is it possible that these powerful desires have somehow contributed to the structural transformation of criminal law and punishment during the twentieth century? To explore this question, I investigate in Part III of this essay three developments in twentieth century criminal law: the evolution of parole board decision-making in the early twentieth century, the development of fixed sentencing guidelines in the late twentieth century, and the growth of criminal profiling as a formal law enforcement tool since the 1960s. In each of these case studies, I focus narrowly on the criminal law decision-making. My interest is in exploring the role of

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(Steven A. Donziger ed., 1996) [hereinafter THE REAL WAR ON CRIME] (discussing the War on Drugs and its impact on black communities); MICHAEL TONRY, MALIGN NEGLECT—RACE, CRIME, AND PUNISHMENT IN AMERICA, 79–80 (1995) [hereinafter TONRY, MALIGN NEGLECT] (suggesting that, since 1980, the War on Drugs and other tough-on-crime measures deliberately contributed to the steady worsening of racial disparities in the justice system); Loïc Wacquant, *Deadly Symbiosis: Rethinking Race and Imprisonment in Twenty-First-Century America*, BOSTON REV., April–May 2002, at 23 (“[T]he astounding upsurge in black incarceration in the past three decades results from the obsolescence of the ghetto as a device for caste control and the correlative need for a substitute apparatus for keeping (unskilled) African Americans in a subordinate and confined position—physically, socially, and symbolically.”).

9. See, e.g., BECKETT, MAKING CRIME PAY, *supra* note 6, at 10 (discussing “the effort to replace social welfare with social control as the principle of state policy”); Loïc Wacquant, *L’ascension de l’État pénal en Amérique*, 124 ACTES DE LA RECHERCHE EN SCIENCES SOCIALES 7 (1998), as well as the articles collected in that Symposium issue titled *De l’État Social à l’État Pénal* in 124 ACTES DE LA RECHERCHE EN SCIENCES SOCIALES (September 1998). For discussion of the separate thesis of the rise of the prison-industrial complex, see, for example THE REAL WAR ON CRIME, *supra* note 8, at 85–87.

10. See, e.g., Malcolm M. Feeley & Jonathan Simon, *The New Penology: Notes on the Emerging Strategy of Corrections and Its Implications*, 30 CRIMINOLOGY 449, 450–52 (1992) (suggesting that a new paradigm for the management of dangerous persons has emerged in the late-twentieth century, accompanied by a new language of penology); JONATHAN SIMON, POOR DISCIPLINE: PAROLE AND THE SOCIAL CONTROL OF THE UNDERCLASS, 1890–1990 (1993) [hereinafter SIMON, POOR DISCIPLINE] (exploring this “new penology” through the historical development of parole in California); Albert W. Alschuler, *The Changing Purposes of Criminal Punishment: A Retrospective on the Past Century and Some Thoughts about the Next*, 70 U. CHI. L. REV. 1, 12 (2003) (discussing the “new penology” and suggesting that “one can discern this new penology in sentencing guidelines and mandatory minimum sentences that allocate punishment wholesale rather than retail”); Stuart A. Scheingold, *Constructing the New Political Criminology: Power, Authority, and the Post-Liberal State*, 23 LAW & SOC. INQUIRY 857, 866–69, 882–86 (1998) (discussing the role of the “new penology”).

actuarial methods in legal practice as opposed to criminological, sociological, or other social scientific practice.

The case studies reveal a gradual development and refinement of the actuarial methods deployed in criminal law over the course of the twentieth century. The statistical methods narrowed in on certain key predictors of crime—most specifically, on the prior criminal history of the convict. Over time, fewer and fewer factors were taken into account, and by the end of the twentieth century most of the statistical tools focused narrowly on offense characteristics and prior delinquency, rather than on the social, familial, and neighborhood background variables that had been such an integral part of the rehabilitative concept. That a clinical<sup>11</sup> model prevailed during the early decades of the twentieth century was due primarily to scarcity of resources, not to lack of will. Inadequate funding of criminal justice institutions delayed the deployment of actuarial predictive tools in criminal law, but not for long. Functioning statistical models were realized and put in place relatively quickly—in some instances, by the early 1930s. The development in criminal law, then, is neither an evolution from a romantic ideal of individualism to an actuarial model, nor a gradual shift from a clinical to a statistical *episteme*. It is, instead, the development and refinement of an actuarial approach to criminal law that was the kernel of the turn to individualization in the early twentieth century, that initially took the shape of a clinical model by default, and that gradually matured into the style of criminal law characteristic of the early twenty-first century.

Did the thirst for knowledge and desire for prediction contribute to the structural transformation of the criminal law in the twentieth century? More specifically, has the refinement of the actuarial models used in criminal law, in the context of scarce law enforcement resources, contributed to the increased racial imbalance in prison? Has it contributed to the theoretical shift during the twentieth century from the individualization of punishment to incapacitation theory? I address the first of these questions in Part IV of this essay—with a focus on criminal profiling and, specifically, racial profiling—and I raise the second in a short conclusion.

## II

### HISTORICAL TRENDS IN CRIMINAL LAW IN THE TWENTIETH CENTURY

#### A. The Individualization of Punishment

The turn of the twentieth century was marked by a strong aspiration toward the individualization of punishment. On the Continent, Raymond Saleilles, a

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11. By clinical, I am referring to a model of prediction or diagnosis that relies primarily on the subjective judgment of experienced decision-makers. See generally PAUL E. MEEHL, CLINICAL VERSUS STATISTICAL PREDICTION: A THEORETICAL ANALYSIS AND A REVIEW OF THE EVIDENCE 4 (1963). Clinical here is opposed to statistical or actuarial, by which I mean a model of prediction that relies on “the mechanical combining of information for classification purposes, and the resultant probability figure which is an empirically determined relative frequency.” *Id.* at 3.

prominent French jurist, published *The Individualization of Punishment* in 1898, observing that “[t]here is today a general movement having as its object the goal of detaching the law from purely abstract formulas which seemed, to the general public at least, to divorce the law from human contact.”<sup>12</sup> This general movement represented the culmination—and wedding—of progress in criminology and justice in law, or what Saleilles called “sociological criminology adapted to the idea of justice.”<sup>13</sup> It reflected a new orientation of judicial institutions and practices toward the individualization of punishment. “One cannot fix punishment in advance in a rigid or strict manner, nor legally regulate it in an inflexible manner, since the purpose of punishment is an individual one that must be achieved by means of specific policies appropriate to the circumstances, rather than by the application of a purely abstract law ignoring the varieties of cases presented,” Saleilles declared.<sup>14</sup> “This adaptation of punishment to the individual is what we call, today, the individualization of punishment.”<sup>15</sup> In the emerging field of sociology, Emile Durkheim identified two laws concerning the evolution of punishment and traced the second law—namely, that punishment consists increasingly of the deprivation of liberty for varying terms—to the individualization of responsibility in more developed societies. As “responsibility becomes more individual,” Durkheim observed, punishment is focused increasingly on the subject, in a graduated manner.<sup>16</sup> Modern societies were marked by the salience of the individual.

A similar development characterized British penalty at the beginning of the twentieth century.<sup>17</sup> The modern break in England—a break from the Victorian penal system—can be traced to the period 1895 to 1914. The earlier Victorian penal system, well in place by the 1860s, was marked by increased reliance on the prison as the primary mode of sanctioning, but its focus on the prison was not individually tailored to the convict. “[A]lthough Victorian prisons exhibited a close and detailed form of *discipline* or ‘dressage’, they did not manifest a concern with *individualisation*. On the contrary, each individual was treated ‘exactly alike’, with no reference being made to his or her criminal type or individual character.”<sup>18</sup> It was also marked by a legal formalist view: punishment in the period was viewed exclusively as a legal event, one which had no room for other disciplinary knowledges like psychiatry, sociology, medicine or econom-

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12. RAYMOND SALEILLES, *L'INDIVIDUALISATION DE LA PEINE: ÉTUDE DE CRIMINALITÉ SOCIALE* 5 (1898) (translation by author).

13. *Id.* at 7.

14. *Id.* at 12–13.

15. *Id.*

16. Émile Durkheim, *Deux Lois de L'Évolution Pénale*, in *L'ANNÉE SOCIOLOGIQUE*, 1900, 81 (1901). The first penal law is that the intensity of punishment diminishes in more advanced and less autocratic societies.

17. See generally DAVID GARLAND, *PUNISHMENT AND WELFARE* (1985).

18. *Id.* at 14 (emphasis in original).

ics.<sup>19</sup> This Victorian model was displaced during the early twentieth century by penological modernism.<sup>20</sup> The range of sanctions was expanded to include probation and various types of reformatory institutions, and new agencies were created to administer these forms of correction. The objectives of the penal system diversified, and there developed “a general objective . . . of *assessment and classification*.”<sup>21</sup> Psychiatric and medical judgments were allowed to inform these processes. The goal was to individualize punishment. This produced “a move *from individualism to individualisation*, which alter[ed] the penal field fundamentally.”<sup>22</sup>

In the United States, legal scholars and positivist criminologists joined efforts to identify the causes of crime and to prescribe individualized treatment. The National Conference on Criminal Law and Criminology, held in Chicago in 1909, marked this turn to individualization. In a statement representing the views of the core legal academics, professors Ernst Freund, Roscoe Pound, John Henry Wigmore, and their colleagues announced a new era of individualized, remedial, penal treatment that would address the individual causes of crime in each and every delinquent.<sup>23</sup> According to these scholars, the new science of crime had deep implications for criminal law: “Modern science recognizes that penal or remedial treatment cannot possibly be indiscriminate and machine-like, but must be adapted to the causes, and to the man as affected by those causes,” they declared.<sup>24</sup> “Thus the great truth of the present and the future, for criminal science, is the individualization of penal treatment,—for that man, and for the cause of that man’s crime.”<sup>25</sup>

Roscoe Pound wrote an introduction to the American translation of Raymond Saleilles’ book, which appeared in 1911, and announced the need for greater individualization of punishment in the United States. “What we have to achieve, then, in modern criminal law is a *system* of individualization,” Pound declared.<sup>26</sup> “More recently throughout the world there has come to be a reaction against administration of justice solely by abstract formula,” Pound explained.<sup>27</sup> “In the United States it is manifest in a tendency toward extra-legal

19. The ideology of punishment was closely connected to that of the liberal political state, which does not intervene to cure or rehabilitate, but rather performs the minimal state task of meting out punishment for violations of a social compact. *Id.* at 18.

20. See David Garland, *Penal Modernism and Postmodernism*, in PUNISHMENT AND SOCIAL CONTROL: ESSAYS IN HONOR OF SHELDON L. MESSINGER 181, 186–87 (Thomas G. Blomberg & Stanley Cohen eds., 1995).

21. Garland, *supra* note 13, at 24 (emphasis in original).

22. *Id.* at 28 (emphasis in original).

23. John H. Wigmore et al., *General Introduction to the Modern Criminal Science Series*, in RAYMOND SALEILLES, THE INDIVIDUALIZATION OF PUNISHMENT, vii (Rachel Szold Jastrow trans. 1911) (1898). See generally, Thomas A. Green, *Freedom and Criminal Responsibility in the Age of Pound: An Essay on Criminal Justice*, 93 MICH. L. REV. 1915, 1949–1964 (1995).

24. Wigmore et al., *supra* note 24, at vii.

25. *Id.*

26. Roscoe Pound, *Introduction to the English Version*, in SALEILLES, INDIVIDUALIZATION OF PUNISHMENT, *supra* note 23, at xvii (emphasis in original).

27. *Id.* at xv.

attainment of just results while preserving the form of the law. . . . The movement for individualization in criminal law is but a phase of this general movement for individualizing the application of all legal rules.”<sup>28</sup>

The notion of individualization of punishment rested on the newly discovered correlations between criminality and home conditions, physical traits, genetic make-up, and neighborhood environment. These correlations offered an alternative to the classical or utilitarian model of crime, which emphasized the rational decision-making process of the delinquent and the need to calibrate the cost of crime to the expected gain from the delinquent behavior. The new era of individualization gave rise to departments of corrections, the juvenile court, and treatment and rehabilitation programs—in sum, to the rehabilitative project. By 1970, the aspiration toward individualized sentencing had led every state to adopt a system of indeterminate sentencing. Legislatures would set maximum sentences, inmates would become eligible for parole after serving about a third of the maximum sentence, and parole boards would decide when inmates were released. Minimum sentences imposed by the legislature were rare and generally frowned upon. Judges had wide discretion over whether to impose probation or imprisonment.<sup>29</sup>

#### B. Uniformity, Consistency, and Proportionality

At the end of the twentieth century, the field of crime and punishment was characterized by a different set of markers. The rehabilitative project of the early and mid-twentieth century gradually faded away, replaced in the latter third of the twentieth century by fixed sentencing schemes. By the mid-1990s, the shift in sentencing could hardly have been more striking. “Beginning with Maine’s abolition of parole in 1975, nearly every state has in some ways repudiated indeterminate sentencing and recast sentencing policies to set standards for judges’ and parole boards’ decisions and thereby to narrow or eliminate their discretion.”<sup>30</sup> Led by Minnesota and Pennsylvania in the 1970s, and then by the federal government in 1984, most jurisdictions turned to sentencing guidelines or other mechanisms—such as statutory determinate sentencing—to constrain judicial sentencing. In 1994, Congress enacted legislation conditioning billions of dollars in grants to states on their adopting sentencing guidelines, eliminating parole, and ensuring that individuals served at least 85 percent of their sentence. By 1996, “[f]ifteen jurisdictions had adopted sentencing guidelines to limit judicial discretion; more than ten had eliminated parole release; another twenty-five had adopted parole guidelines; many had narrowed the ambit of good time; and all had enacted mandatory minimum sentence legislation (often requiring minimum ten-, twenty- or thirty-year terms and sometimes mandatory sentences of life-without-possibility-of-parole).”<sup>31</sup>

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28. *Id.* at xv–xvi.

29. See TONRY, SENTENCING, *supra* note 7, at 6.

30. *Id.* at 4.

31. *Id.* at 6–7.



The new constraints on discretion include mandatory minimum penalties, firearm and other sentencing enhancements, fixed sentencing guidelines, repeat-offender statutes such as “three-strikes-and-you’re-out” laws, habitual offender enhancements, and a system of guidelines for state parole authorities.<sup>32</sup> The focus on categories (and subtypes) of crime, rather than on individual causes of crime, is captured well by the federal firearm enhancement statute.<sup>33</sup> The statute provides in part that any person who carries a firearm in connection with a crime of violence or drug trafficking shall be sentenced to an additional enhancement of, for instance, not less than ten years if the firearm is “a short-barreled rifle, short-barreled shotgun, or semiautomatic assault weapon,” and not less than thirty years if the firearm is “a machinegun or a destructive device, or is equipped with a firearm silencer or firearm muffler.”<sup>34</sup> A second or subsequent conviction involving the latter type of firearm is to be punished by life imprisonment.<sup>35</sup>

Many of these developments were initiated at the federal level. At the same time, Congress steadily expanded the number of federal crimes. Whereas the federal criminal code contained 183 separate offenses in 1873, by 2000 it was estimated to contain three thousand offenses.<sup>36</sup> The expansion of the federal criminal code was accompanied by increased federal enforcement of traditional police powers through law enforcement initiatives such as “Project Exile” in Richmond, Virginia, which federalized the prosecution of state gun offences.<sup>37</sup>

Law enforcement also witnessed a gradual shift toward the increased use of criminal profiling. Criminal profiling is generally traced to the mid-twentieth century,<sup>38</sup> although arguably it has antecedents in the early twentieth century

32. *See generally*, YALE KAMISAR ET AL., *MODERN CRIMINAL PROCEDURE: CASES, COMMENTS AND QUESTIONS*, 1498–1502 (10th ed. 2002); KATE STITH AND JOSE A. CABRANES, *FEAR OF JUDGING: SENTENCING GUIDELINES IN THE FEDERAL COURTS* (1998); UNITED STATES SENTENCING COMMISSION, *MANDATORY MINIMUM PENALTIES IN THE FEDERAL CRIMINAL JUSTICE SYSTEM* (1991); UNITED STATES SENTENCING COMMISSION, *SUPPLEMENTARY REPORT ON THE INITIAL SENTENCING GUIDELINES AND POLICY STATEMENTS*, 3 (1987) [hereinafter *SUPPLEMENTARY REPORT*]; Richard S. Frase, *Sentencing Guidelines Are “Alive and Well” in the United States in SENTENCING REFORM IN OVERCROWDED TIMES—A COMPARATIVE PERSPECTIVE* 12 (Michael Tonry & Kathleen Hatlestad eds., 1997).

33. 18 U.S.C. § 924(c) (2000).

34. 18 U.S.C. § 924(c)(1)(B)(i) and (ii).

35. 18 U.S.C. § 924(c)(1)(C)(ii).

36. *See* Tom Stacy and Kim Dayton, *The Underfederalization of Crime*, 6 CORNELL J.L. & PUB. POL’Y 247, 251 n.19 (1997); William Stuntz, *The Pathological Politics of Criminal Law*, 100 MICH. L. REV. 505, 513–515, n.32 (2001). This occurred during a period of steady increases in the number of state crimes. In Illinois, for instance, the criminal code has grown from 131 separate crimes in 1856 to 421 at the turn of the twenty-first century; in Virginia, the criminal code mushroomed from 170 offenses to 495 over the same period; and in Massachusetts, from 214 crimes to 535. *See* Stuntz, *supra*, at 513–515.

37. “Project Exile” was conceived and implemented in 1996, and has been expanded in the twenty-first century into a national exile program under the rubric “Project Safe Neighborhood.” *See generally*, Daniel C. Richman, *‘Project Exile’ and the Allocation of Federal Law Enforcement Authority*, in *GUNS, CRIME, AND PUNISHMENT IN AMERICA* (Bernard E. Harcourt ed. 2003).

38. *See, e.g.*, Milton Heumann & Lance Cassak, *Profiles in Justice? Police Discretion, Symbolic Assailants, and Stereotyping*, 53 RUTGERS L. REV. 911, 916 (2001) (“Profiling as a separate and distinct law enforcement technique began in the mid-twentieth century and developed along two lines.”).

eugenics movement. The basic idea is to develop correlations between specific criminal activity and group-based traits in order to help law enforcement identify potential suspects for investigation. An early instance of criminal profiling involved the hijacker profiles that were developed in the 1960s to disrupt the hijacking of American commercial airplanes.<sup>39</sup> Criminal profiling became more frequent in the 1970s with drug-courier profiles and alien smuggling profiles, and was used increasingly in the last quarter of the twentieth century.<sup>40</sup> The turn to profiling reflects an overall shift from the earlier reform model of “professional” policing. This earlier model traced back to August Vollmer’s tenure as police chief in Berkeley beginning in 1905 and to the 1931 Wickersham Commission report condemning police corruption and brutality.<sup>41</sup> It was characterized by a strategy of rapid response to 911 calls. And it was displaced by the crime prevention models of the late twentieth century—what I have referred to elsewhere as the order-maintenance approach to criminal justice.<sup>42</sup> The order-maintenance approach relies heavily on offender profiles to target stop-and-frisk encounters and misdemeanor arrests, to disperse gang members, to stop drug couriers and illegal immigrants, and to control the disorderly.

### C. Carceral Trends

The twentieth century was also marked by an exponential increase in the number of persons in federal and state prisons and local jails, and under federal and state supervision. Federal and state prison populations nationwide grew from less than 200,000 in 1970 to more than 1,300,000 in 2001, with another 600,000 persons held in local jails (*see Figure 1*).<sup>43</sup> In New York City, where order maintenance was aggressively implemented in 1994 under the administration of Mayor Rudolph Giuliani and his first police commissioner, William Bratton, the policing strategy produced an immediate surge in arrests for misdemeanor offenses (*see Figure 2*).

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39. DAVID A. HARRIS, *PROFILES IN INJUSTICE: WHY RACIAL PROFILING CANNOT WORK*, 17 (2002).

40. *See generally id.* at 10–11, 17–26.

41. Jerome H. Skolnick & James J. Fyfe, *ABOVE THE LAW: POLICE AND THE EXCESSIVE USE OF FORCE*, 43–48, 174–184 (1993).

42. *See generally* BERNARD E. HARCOURT, *ILLUSION OF ORDER: THE FALSE PROMISE OF BROKEN WINDOWS POLICING* (2001).

43. SOURCEBOOK, *supra* note 3, at tables 6.1 and 6.27; PRISONERS IN 2001, *supra* note 3, at 2.

FIGURE 1:  
SENTENCED PRISONERS UNDER JURISDICTION OF STATE  
AND FEDERAL CORRECTIONAL AUTHORITIES ON  
DECEMBER 31 (U.S. 1925-2000)

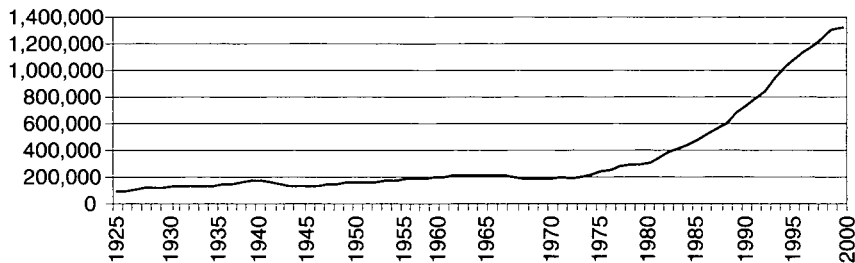
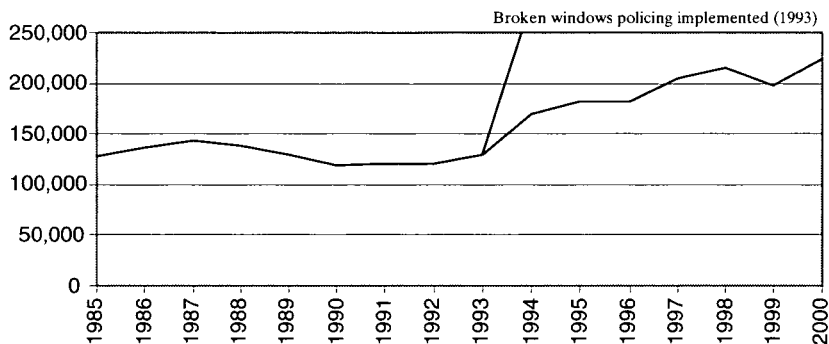


FIGURE 2:  
ADULT MISDEMEANOR ARRESTS IN  
NEW YORK CITY



In addition, African Americans began to represent an increasing proportion of the supervised population. Since 1926, the year the federal government began collecting data on correctional populations, the proportion of African Americans newly admitted to state prisons has increased steadily from 23.1 % to 45.8% in 1982; it reached 51.8% in 1991, and stood at 47% in 1997 (*see Figure 3*).<sup>44</sup> In 1997, nine percent of all adult African Americans were under correctional supervision in this country, in contrast to two percent of European Americans.<sup>45</sup> The trend from 1984 to 1997 is reflected in Figure 4, which represents the percentage of adult populations in state and federal prisons and local

44. For statistics from 1926 to 1982, see Patrick A. Langan, *Racism on Trial: New Evidence to Explain the Racial Composition of Prisons in the United States*, 76 J. CRIM. L. & CRIMINOLOGY 666, 667 (1985); for statistics from 1985 to 1989, see U.S. BUREAU OF JUSTICE STATISTICS, CORRECTIONAL POPULATIONS IN THE UNITED STATES, 1995, Table 1.16 (1997); for statistics from 1990 to 1997, see U.S. BUREAU OF JUSTICE STATISTICS, CORRECTIONAL POPULATIONS IN THE UNITED STATES, 1997, at 10, Table 1.20 (2000) [hereinafter CORRECTIONAL POPULATIONS].

45. SOURCEBOOK, *supra* note 3, at 488, table 6.2.

jails by race and gender as a proportion of their representation in the general population.<sup>46</sup>

FIGURE 3:  
RACIAL DISTRIBUTION OF ADMISSIONS TO STATE PRISONS, 1926–1997

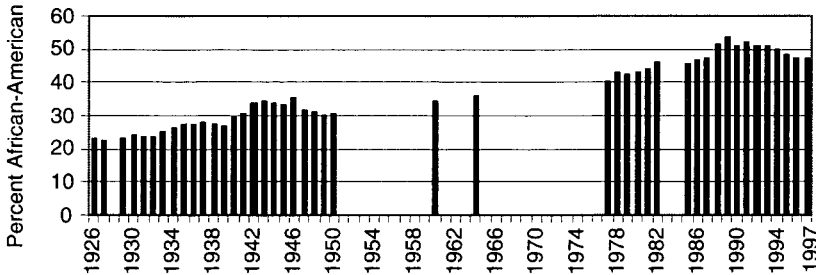
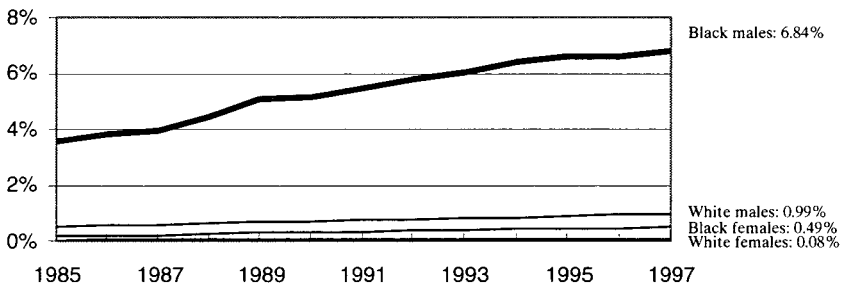


FIGURE 4:  
PERCENT OF U.S. ADULT POPULATION IN STATE OR FEDERAL PRISONS OR IN LOCAL JAILS, BY RACE AND GENDER, 1985–1997



46. CORRECTIONAL POPULATIONS, *supra* note 44, at 4, figure 1. For excellent discussions of these trends, see TONRY; MALIGN NEGLECT, *supra* note 8, at 28–31, 56–68 (1995); See also JUSTICE POLICY INSTITUTE, CELLBLOCKS OR CLASSROOMS?: THE FUNDING OF HIGHER EDUCATION AND CORRECTIONS AND ITS IMPACT ON AFRICAN AMERICAN MEN (2002) available at <http://www.justicepolicy.org/coc1/corc.htm> (last visited May 5, 2003).

## III

## CASE STUDIES IN TWENTIETH CENTURY CRIMINAL LAW

How can we even begin to understand the significant structural transformations of the criminal law field during the twentieth century? In this essay, drawing on three case studies, I explore a possible link between the structural changes and the refinement of the actuarial methods used in the criminal law.

The place to start to frame the case studies is the original turn to individualization of punishment in the late nineteenth and early twentieth century. It is important to emphasize that this movement itself was the product of actuarial aspirations. The search for statistical regularity precedes these case studies, and, somewhat paradoxically, helped bring about the very turn to individualization that marked the early period. The desire to know the criminal and better predict his criminality triggered the modern reform movement.

As Ian Hacking persuasively demonstrates in *The Taming of Chance*, the laws of probability largely had displaced the laws of necessity in much of Western discourse by the late nineteenth century, especially in the area of crime and punishment.<sup>47</sup> The erosion of determinism during the nineteenth century did not give way to chaos or indeterminism, but instead to the laws of chance and probability, to the bell-shaped curve. Paradoxically, the transition produced even greater control over the physical and social environment. As Hacking explains:

There is a seeming paradox: the more the indeterminism, the more the control. This is obvious in the physical sciences. Quantum physics take for granted that nature is at bottom irreducibly stochastic. Precisely that discovery has immeasurably enhanced our ability to interfere with and alter the course of nature. A moment's reflection shows that a similar statement may be attempted in connection with people. The parallel was noticed quite early. Wilhelm Wundt, one of the founding fathers of quantitative psychology, wrote as early as 1862: "It is statistics that first demonstrated that love follows psychological laws."<sup>48</sup>

Hacking relates statistical progress to a parallel phenomenon, namely the proliferation and publication of printed numbers beginning in the sixteenth and seventeenth centuries, but flourishing during and after the Napoleonic era.<sup>49</sup> The proliferation of numbers helped create the categories of the normal, criminal, and pathological in the nineteenth century.<sup>50</sup> As Jack Katz similarly has suggested, these categories took hold as a product of historical and political-institutional forces; rarely, if ever, a result of causal social theory.<sup>51</sup> But for our purposes here, the important point is that the paradigm shift took place during the eighteenth and nineteenth centuries and was practically complete by the turn of the twentieth century. "The cardinal concept of the psychology of the

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47. IAN HACKING, *THE TAMING OF CHANCE*, 1-8 (1990).

48. *Id.* at 2.

49. *Id.* at 27-34.

50. *Id.* at 160-169.

51. JACK KATZ, *SEDUCTIONS OF CRIME: MORAL AND SENSUAL ATTRACTIONS IN DOING EVIL* 43 (1988).

Enlightenment had been, simply, human nature,” Hacking explains.<sup>52</sup> “By the end of the nineteenth century, it was being replaced by something different: normal people.”<sup>53</sup> Laws of chance had become autonomous—not irreducible, but autonomous in the sense that they could be used not only to predict but also to explain phenomena.

Most of these laws of chance were first observed, recorded, and publicized in the area of delinquency—crime, suicide, madness, prostitution. Adolphe Quetelet, the great Belgian statistician, would write as early as 1832 of the statistical regularities concerning crime.<sup>54</sup> He described the phenomenon as a “kind of budget for the scaffold, the galleys and the prisons, achieved by the French nation with greater regularity, without doubt, than the financial budget.”<sup>55</sup> Karl Pearson, the famous statistician and eugenicist who assisted Charles Goring at the turn of the twentieth century, would summarize Goring’s findings about “the English criminal as he really is” as “not absolutely differentiated by numerous anomalies from the general population, but relatively differentiated from the mean or population type, because on the average he is selected from the physically poorer and mentally feebler portion of the general population.”<sup>56</sup> The criminal,” Pearson explained, “is not a *random* sample of the general population, either physically or mentally. He is, rather, a sample of the less fit moiety of it.”<sup>57</sup> Many years before that, Madame de Staël would observe that “there are cities in Italy where one can calculate exactly how many murders will be committed from year to year.”<sup>58</sup> The first inroads into chance were made in the area of crime and punishment.

And these laws of chance were precisely what grounded the era of individualization in punishment at the turn of the twentieth century. The movement was premised on the new science of crime—on the idea that there are identifiable causes of crime that we could discover and study. The National Conference of 1909, which gave rise to the American Institute of Criminal Law and Criminology, was an outgrowth of the statistical discoveries emerging from positive criminology. Ernst Freund, Roscoe Pound and their colleagues explained:

This truth opens up a vast field for re-examination. It means that we must study all the possible data that can be causes of crime,—the man’s heredity, the man’s physical and moral make-up, his emotional temperament, the surroundings of his youth, his present home, and other conditions,—all the influencing circumstances. *And it means that the effect of different methods of treatment, old or new, for different kinds of men*

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52. HACKING, *supra* note 47, at 1.

53. *Id.*

54. *Id.* at 105.

55. *Id.*

56. Karl Pearson, *Charles Goring and his Contributions to Criminology*, in CHARLES GORING, *THE ENGLISH CONVICT: A STATISTICAL STUDY*, ix, xii–xiii (1919).

57. *Id.*

58. Quoted in HACKING, *supra* note 47, at 41 (quoting de Staël’s conclusion that this demonstrates that “events which depend on a multitude of diverse combinations have a periodic recurrence, a fixed proportion, when the observations result from a large number of chances”).

*and of causes, must be studied, experimented and compared. Only in this way can accurate knowledge be reached, and new efficient measures be adopted.*<sup>59</sup>

The development and refinement of criminology in the nineteenth century was tied primarily to progress in statistical methods and analysis, and to the collection and accumulation of statistical data. Freund, Pound and their colleagues, in fact, lamented the delay it had taken for American criminal jurisprudence to embrace the statistical paradigm.

All this has been going on in Europe for forty years past, and in limited fields in this country. All the branches of science that can help have been working,—anthropology, medicine, psychology, economics, sociology, philanthropy, penology.<sup>60</sup> The law alone has abstained. The science of law is the one to be served by all this.

The individualization movement, in this sense, rested on a probabilistic model that attempted to predict the likely success of different treatment interventions based on inferences from an accumulation of data points about a particular individual. The turn to individualization rested on probabilities and actuarial methods. This insight represents an important lens through which we must explore the three case studies.

#### A. The Emergence of Parole

At the turn of the twentieth century, the ideal of individualized punishment was carried out predominantly by means of indeterminate sentencing and delegation of authority to parole boards. Judges essentially extricated themselves from the day-to-day business of individualization by sentencing convicted offenders to a wide range of imprisonment and affording corrections administrators and parole boards wide discretion to decide about rehabilitation and release.

The early parole practices in the state of Illinois were the subject of detailed study and offer a good illustration of the development of parole. In 1927 and 1928, sociology professor Ernest Burgess of the University of Chicago, law professor Andrew Bruce of Northwestern University, and Dean Albert Harno of the University of Illinois College of Law conducted extensive research on parole procedures at the request of the chairman of the Illinois parole board. Two other researchers—who would play important roles in the subsequent history of parole in Illinois—were made part of the research team: John Landesco, described as “an expert in vocational education and an experienced student in criminology,”<sup>61</sup> was appointed as a field worker in the study, and Clark Tibbitts was selected “as research assistant upon certain special phases of the subject.”<sup>62</sup> The research project involved, among other things, extensive interviews, study of parole records, a review of the entire criminal and penal records of three thousand paroled men, and physical visits to the penal institutions. It resulted

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59. Wigmore et al., *supra* note 23, at vii (emphasis added).

60. *Id.*

61. Letter of Transmission in Andrew A. Bruce et al., *A Study of the Indeterminate Sentence and Parole in the State of Illinois*, 19 J. AM. INST. CRIM. L. & CRIMINOLOGY 1, 5 (1928).

62. *Id.*

in a 306-page report published in the *Journal of the American Institute of Criminal Law and Criminology* in May 1928.<sup>63</sup>

In Illinois, indeterminate sentencing replaced fixed sentencing gradually over the course of the late nineteenth century. The first sightings of the idea of parole occurred in the context of a juvenile reform school for boys in 1867, and was formalized for male juvenile offenders in 1891 and for female juvenile offenders in 1893. For adults, good-time allowances began to surface around 1863, and a general adult parole system was enacted in 1895. Indeterminate sentencing was enacted by the Illinois legislature in 1917 (for crimes other than misprision of treason, murder, rape and kidnapping) to make the parole system effective.<sup>64</sup> By the time of the writing of the Report in 1928, the idea of indeterminate sentencing was well established. As law professor Andrew Bruce declared, somewhat enthusiastically:

The wisdom of the policy of indeterminate sentence and the parole, if properly administered, is now almost universally recognized, not only in America, but throughout the civilized world. The policy can hardly any longer be classed as a product of unenlightened sentimentalism.

In 1922 only four states of the American Union were without either the indeterminate sentence or the parole system. In 1925 the laws of forty-six of the forty-eight American states made definite provision for the release of prisoners on parole, only Mississippi and Virginia having no such laws.

In 1925 also, the International Prison Commission, meeting in London with fifty-three nations represented, adopted a resolution favoring the indeterminate sentence and the parole laws and recommending their adoption to the Governments of the civilized world.<sup>65</sup>

This ideal account of the parole system, however, was marred at first by the lack of resources and adequate staffing. The Illinois parole system was severely short staffed until at least 1927. The 1897 act, which created indeterminate sentencing in Illinois, provided for the creation of a state board of pardons consisting of three persons.<sup>66</sup> These three persons were charged with overseeing *all* paroles in the Illinois system. This lasted until 1917 when the legislature created a Department of Public Welfare and incorporated the board of pardons and paroles as a subdivision;<sup>67</sup> however, the legislation did not state who should compose the parole board, and the responsibility for determining parole fell entirely on the supervisor of paroles and three appointed assistants.<sup>68</sup> With over seven thousand persons incarcerated in the mid-1920s, the parole process was haphazard at best. The board was not able to review all the cases and would only cursorily review those it did, spending two or three minutes with the

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63. *See id.* at 281.

64. *Id.* at 42–43, 50, 51; *see also Attorney General's Survey of Release Procedures*, DIGEST OF FEDERAL AND STATE LAWS ON RELEASE PROCEDURES, 311 (1939) (tracing the history of parole in Illinois from its inception in 1891 to 1939) [hereinafter *Attorney General's Survey*].

65. Bruce et al., *supra* note 61, at 63.

66. *Id.* at 53, 57; *see also Attorney General's Survey*, *supra* note 64, at 310 n.3.

67. *See Attorney General's Survey*, *supra* note 64, at 311.

68. Bruce et al., *supra* note 61, at 57, 84.



inmate and reading primarily the state's statement and the synopsis of the case. The parole board had little time to spend with any one case and the materials they received were often a jumbled mess. The Report indicates that researchers

found the material in the 'jackets' in confusion. No effort had been made to file in orderly sequence and no list or inventory was kept with the 'jackets' of the documents and papers they contained. All the material was merely jammed in together. . . . often it took a member of the [research team] a day, sometimes two and even three days, to disentangle the mass of material in one of these jackets, to rearrange it, and to read and digest it.<sup>69</sup>

According to the Report, few inmates were paroled, and those who were, were "guessed out of" prison."<sup>70</sup> "The responsibility imposed on the Supervisor and the labor required of him by such numbers was too great. It was resulting," the Report concluded, "in superficiality."<sup>71</sup>

Lack of resources and short staffing were not unique to Illinois, but were common among state parole agencies. The parole system in California, for instance, was initiated in about 1893. Although parole began to be used increasingly—with the percentage of releases through parole increasing from 7% in 1907 to 35% in 1914—it was not until 1914 that a state parole officer was appointed.<sup>72</sup> It took another fifteen years for a field staff to be assembled.<sup>73</sup> "In California supervision was largely a matter of paperwork since there was no real field staff until the 1930s, except for the single parole officer headquartered in San Francisco."<sup>74</sup> Most other states suffered from understaffed, resource-deprived parole organizations that did not fulfill the promise of rehabilitation. As David Rothman has written regarding the parole system in the Progressive Era:

No sooner does one plunge into the realities of parole than the question of its persistence is further complicated, for one uncovers almost everywhere a dismal record of performance. Neither of the two essential tasks of parole, the fixing of prison release time or post-sentence supervision, was carried out with any degree of competence or skill. Amateurs on parole boards reached their decisions hastily and almost unthinkingly, while overworked and undertrained parole officers did little more than keep a formal but useless file on the activities of their charges. Whatever the reasons for the survival of parole, they will not be found in the efficient or diligent administration of the system.<sup>75</sup>

Returning to Illinois, the legislature passed a bill in 1927 at the urging of the supervisor of paroles, directing that the parole board consist of a supervisor and nine members. A separate appropriation was made for this board, which allowed for, among other things, investigators to conduct field work on the out-

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69. *Id.* at 85.

70. *Id.* at 84.

71. *Id.* at 87.

72. SIMON, POOR DISCIPLINE, *supra* note 10, at 48–49.

73. *Id.*

74. *Id.* at 53.

75. DAVID ROTHMAN, CONSCIENCE AND CONVENIENCE: THE ASYLUM AND ITS ALTERNATIVES IN PROGRESSIVE AMERICA, 162 (1980).

side regarding parole candidates.<sup>76</sup> This expanded board formed sub-committees of three members that sat three days per week at the three separate primary institutions in Illinois—Joliet, Menard, and Pontiac.<sup>77</sup> The sub-committees at the institutions, and then the full committee reviewing the recommendation, would consider whether parole was appropriate.

When these additional resources and staffing were made available, the decision to parole began to approximate a clinical judgment. It rested on empirical data, and represented a subjective judgment as to whether the individual would be a good candidate for parole. In response to the question, “On what principally do you base your judgment in granting or refusing a parole?,” the chair of the parole board explained:

First, the man's history; his education; his apparent mentality; his physical condition; his attitude towards discipline and toward society, as evidenced by his institutional record. In addition to that, his former habits; his associates; the environment under which he grew up; all the facts and circumstances relating to the man's history before he committed the crime, so far as it is available to us, his commission of the crime and his conduct since and while being punished; and his learning of one or more useful trades while confined. His attendance at school or church in the institution, and finally our own conclusion after talking to the prisoner in great detail and examining him several times before he is given a final parole.

It is very rarely the case that we talk to a prisoner less than three or four times now before he is given his final parole, so your question is a hard question to answer. It is the net collected judgment of the ten men after reviewing all the facts and circumstances with reference to the individual. In other words, we try to fit the punishment and the scheme of reformation to the individual and not the crime after the inmate or the prisoner has served what is believed to be a reasonable punishment, as a deterrent to others, or other would-be criminals, for the crime committed.<sup>78</sup>

To give a flavor of the written rationale offered by the board, here are two examples of the reports from the sub-committees:

A member of this Committee [research team] has read several hundred of the sub-committee's reports. The following may be taken as typical: “(No.) . . . . ., (name) . . . . . Received . . . . ., 1923, from . . . . . County upon a plea of guilty to buaglary (sic) and larceny. Paroled, conditional that he be deported to Canada and that the authorities come after him. He is a Canadian. Did one term in the Ontario prison. Has been in this institution more than four years and we believe he is now entitled to release. There is in the record the necessary orders for his deportation to Canada, both our own government and the Canadian government having consummated arrangements for bringing that about whenever he is released by the Illinois authorities.

“(No.) . . . . . (Name) . . . . . Received . . . . ., 1926, from . . . . . County upon plea of guilty to burglary and larceny. Not ready for parole. Young . . . . . has done a term at the Vandalia State Farm, was once tried and acquitted for the killing of his step-father. He is regarded by the authorities as a pretty bad young man. We have paroled his associate . . . . ., because he has had no previous record, but we feel that this boy should have a substantial

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76. Bruce et al., *supra* note 61, at 58–59, 90–91.

77. *Id.* at 90.

78. *Id.* at 93.

lesson to the end that he will learn that he cannot do the things that he has been doing so flagrantly.”<sup>79</sup>

These “typical” subcommittee reports are revealing, and not terribly impressive. The reality of the parole decisions is that they turned in large part on the state attorney’s statement to the parole board. As the Report noted, “no recommendations, evidence or other material that come before the Parole Board have greater influence with it than the statements concerning prisoner coming from the trial judges and the State’s Attorneys.”<sup>80</sup> And these statements from the judge and state’s attorney were, in the view of the research team, most often inadequate to address issues of rehabilitation and often factually wrong. In addition, there was an important political dimension to the decision to parole. The research team found that a large number of the jackets contained evidence of lawyers employed to obtain favorable parole decisions or “of a prominent politician at work on the case.”<sup>81</sup> “[T]here is abundant evidence in the records that the efforts of those who are induced to champion the cause of the prisoner are often placed upon other grounds than those of the facts.”<sup>82</sup>

The research team expressed some skepticism about the parole board’s functioning, suggesting that some of its rationales and written reports “lacked discrimination”<sup>83</sup> and were somewhat impressionistic. Dean Harno recommended “respectfully” that the parole board members “become thorough students of the theory of parole” and that “the mastering of the theory will materially enrich their judgment.”<sup>84</sup> The research team hinted that the data on which the parole board made its decisions was often “very scanty,” and suggested that the board conduct more independent investigation to obtain a full dossier on the individuals. “With more funds at its disposal than formerly,” Dean Harno emphasized, “the Board needs to put skilled investigators with training in sociology and social work on the job to get this information. The Committee commends this to the Board as an essential feature supplementing the other material it has at its disposal.”<sup>85</sup>

Professor Ernest Burgess went further and recommended an even more scientific approach. Burgess conducted a study of three thousand inmates paroled in the four-to-five years prior to December 31, 1924,<sup>86</sup> and explored whether there was any statistical relationship between success on parole (as defined by

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79. *Id.* at 91 n.2.

80. *Id.* at 94.

81. *Id.* at 273.

82. Bruce et al., *supra* note 61, at 273.

83. *Id.* at 98 n.1

84. *Id.* at 99.

85. *Id.* at 100–101.

86. The study took 1,000 cases of paroled convicts from each of the three main adult male penal institutions (Illinois State Penitentiary at Joliet, Illinois Southern Penitentiary at Menard, and Illinois State Reformatory at Pontiac). The cases taken were “all consecutive, beginning with December 31, 1924, and going backward until 1,000 had been examined from each institution.” *Id.* at 6. According to the Report, “[t]herefore, each man had been released on parole from the institution at least two and one-half years, and, in certain instances, four, five, and even six years at the time the inquiry was made.” *Id.*

the limited achievement of not violating parole) to some two dozen independent variables. The idea was to see which factors were associated with the likelihood of success on parole. The twenty-two variables included such things as an inmate's father's race or nationality, social type, mental age, personality type and psychiatric prognosis, in addition to the circumstances of the crime and prior criminal records.<sup>87</sup> With regard to national origin, Burgess discovered "the smallest ratio of violations among more recent immigrants like the Italian, Polish and Lithuanian," and "the highest rates of violation among the older immigrants like the Irish, British and German."<sup>88</sup> Burgess did not report any correlations along race lines, other than to observe that "The group second in size was the Negro with 152 at Pontiac, 216 at Chester, and 201 at [Joliet]."<sup>89</sup> With regard to some of the other interesting independent variables—social type and psychiatric personality type—I will reproduce the tables in full here. This is the table regarding social type produced in the Report.<sup>90</sup>

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87. The full list of twenty-two factors included: "(1) nature of offense; (2) number of associates in committing offense for which convicted; (3) nationality of the inmate's father; (4) parental status, including broken homes; (5) marital status of the inmate; (6) type of criminal, as first offender, occasional offender, habitual offender, professional criminal; (7) social type, as ne'er-do-well, gangster, hobo; (8) county from which committed; (9) size of community; (10) type of neighborhood; (11) resident or transient in community when arrested; (12) statement of trial judge and prosecuting attorney with reference to recommendation for or against leniency; (13) whether or not commitment was upon acceptance of lesser plea; (14) nature and length of sentence imposed; (15) months of sentence actually served before parole; (16) previous criminal record of the prisoner; (17) his previous work record; (18) his punishment record in the institution; (19) his age at time of parole; (20) his mental age according to psychiatric examination; (21) his personality type according to psychiatric examination; (22) and psychiatric prognosis." Bruce et al., *supra* note 61, at 257–258.

88. *Id.* at 259.

89. *Id.* at 259.

90. *Id.* at 261. The "ne'er-do-well" category is a term-of-art referring to someone who is a habitual criminal type (akin to the alcoholic, drug addict, gambler or tramp) who does not actually support himself entirely by crime "yet seemed to be continuously delinquent and never willing or able for any length of time to be law abiding." *Id.* at 241.

TABLE 1:  
SOCIAL TYPE IN RELATION TO PAROLE VIOLATION  
VIOLATION RATE BY INSTITUTIONS.

Social Type.	Pontiac	Menard	Joliet
All persons .....	22.1%	26.5%	28.4%
Hobos.....	14.3	46.8	70.5
Ne'er-do-well .....	32.8	25.6	63.0
Mean Citizen.....	—	30.0	9.5
Drunkard.....	37.5	38.9	22.7
Gangster .....	22.7	23.2	24.1
Recent Immigrant .....	36.8	16.7	4.0
Farm Boy.....	11.0	10.2	16.7
Drug Addict .....	4.3	66.7	83.3

The table regarding psychiatric personality type:<sup>91</sup>

TABLE 2:  
PSYCHIATRIC PERSONALITY TYPE IN RELATION  
TO PAROLE VIOLATIONS.  
VIOLATION RATE BY INSTITUTIONS.

Personality Type.	Pontiac	Menard	Joliet
All persons .....	22.1%	26.5%	28.4%
Egocentric .....	24.3	25.5	38.0
Socially Inadequate .....	20.0	24.7	22.6
Emotionally Unstable .....	8.9	*	16.6

\* Number of cases insufficient for calculating percentage.

Burgess concluded from his study that identifiable factors could be used to give much greater predictive abilities to the parole board. “[T]here can be no doubt of the feasibility of determining the factors governing the success or the failure of the man on parole,” Burgess wrote. “Human behavior seems to be subject to some degree of predictability.”<sup>92</sup> He elaborated:

Many will be frankly skeptical of the feasibility of introducing scientific methods into any field of human behavior. They will dismiss the proposal with the assertion that human nature is too variable for making any prediction about it. . . . [But] [i]t would be entirely feasible and should be helpful to the Parole Board to devise a sum-

91. *Id.* at 269.

92. *Id.* at 271.

mary sheet for each man about to be paroled in order for its members to tell at a glance the violation rate for each significant factor.<sup>93</sup>

Burgess recommended to the parole board that it create a multi-factor test to determine likelihood of parole success. This Burgess did himself, creating a twenty-one factor test to grade each inmate, and applying the test to his sample of three thousand cases. He assigned points for each factor on which the inmate would have been above the average (high likelihood of success), and then ran an analysis to determine the percentage of violators. Those with the highest number of above average factors (16 to 21) had the lowest violating rates (1.5%) and those with the lowest number of above average factors (2 to 4) had the highest offending rates (76%). This validated his point, Burgess suggested:

The practical value of an expectancy rate should be as useful in parole administration as similar rates have proved to be in insurance and in other fields where forecasting the future is necessary. Not only will these rates be valuable to the Parole Board, but they will be equally valuable in organizing the work of supervision. For if the probabilities of violation are even, it does not necessarily mean that the prisoner would be confined to the penitentiary until his maximum was served, but that unusual precautions would be taken in placing him and in supervising his conduct. Less of the attention of the parole officers need in the future be directed toward those who will succeed without attention and more may be given to those in need of assistance.<sup>94</sup>

“[P]redictability is feasible,” Burgess wrote. “The prediction would not be absolute in any given case, but, according to the law of averages, would apply to any considerable number of cases.”<sup>95</sup> He recommended that the parole decision be based on a multi-factor analysis using these variables and urged the supervisor of paroles to create an actuarial table of success expectancy. On the basis of his research, the full research team declared in its final recommendations to the chair of the parole board:

[T]he Committee recommends that the Parole Board seriously consider the placing of its work on a scientific basis by making use of the method of statistical prediction of the non-violation of parole both in the granting of paroles and in the supervision of paroled men. One competent statistician could compile the necessary information from the records and still further develop the accuracy of prediction by this new method.<sup>96</sup>

Burgess' actuarial system was adopted almost immediately by the Illinois parole board, and began to be implemented in the period 1932 to 1933. Clark Tibbitts conducted additional research and improved slightly on Burgess's system.<sup>97</sup> At the urging of John Landesco, who had been appointed as a member of the parole board, the Illinois legislature passed a bill in 1933 providing for the hiring of sociologists and actuarians “to make analyses and

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93. Bruce et al., *supra* note 61, at 283.

94. *Id.* at 285.

95. *Id.* at 284.

96. *Id.* at 305.

97. See Clark Tibbitts, *Success or Failure on Parole Can be Predicted*, 22 J. CRIM. L. & CRIMINOLOGY 11 (1931).

predictions in the cases of all men being considered for parole.”<sup>98</sup> Ferris F. Laune, Ph.D., was hired in the official capacity of “Sociologist and Actuary” at the Illinois State Penitentiary at Joliet.<sup>99</sup> As Laune explained:

It was definitely understood that the work of these men would be something more than mere routine application of the experience tables already developed by Burgess and Tibbitts; they were expected to engage in further research for the purpose of expanding these tables, to refine the factors which had gone into them, and to improve the methods of prediction in any other way which seemed possible.<sup>100</sup>

By 1939, the Illinois parole board itself was assisted by three sociologists and actuaries—as well as five investigators, and approximately sixteen stenographers, file clerks, and watchmen.<sup>101</sup> There was, in addition, a division of parole supervision with fifty-four employees in Chicago and a slightly smaller office in Springfield.<sup>102</sup> The actuaries would compile the inmate’s information and prepare a report—called a “prognasio”—that predicted the likelihood of success on parole. The “prognasio” was “based on the revised Burgess ‘probability’ scale.”<sup>103</sup>

The Burgess model was relatively primitive, insofar as it merely added up the variables to produce a score, rather than use a weighted system of multiple regression analysis. Nevertheless, it was a precursor that influenced other models, including the later federal parole decision-making method.<sup>104</sup> Most other states took longer to adopt these types of measures; as of 1961, only one other state used statistical prediction methods as part of the parole decision.<sup>105</sup> But in the 1970s, the actuarial approach became more widely accepted.

What happened, though, is that the actuarial models became narrower and focused on a smaller set of variables. Gradually, the key factor for predicting success or failure on parole became prior criminal history. The federal government, for example, adopted more narrow, more focused parole guidelines. The United States Parole Commission relied on the “Salient Factor Score” as an aid in predicting parole performance. That method used seven predictive factors; however, the majority of those seven factors related to prior delinquency. The seven factors included prior convictions, prior incarcerations, age at first commitment, offense involvement of auto theft or checks, prior parole revocations, drug history, and employment history.<sup>106</sup> California adopted an actuarial model

98. FERRIS F. LAUNE, *PREDICTING CRIMINALITY: FORECASTING BEHAVIOR ON PAROLE* 5 (1936).

99. *See id.*, cover page.

100. *Id.* at 5.

101. *Attorney General’s Survey*, *supra* note 64, at 312.

102. *See id.* at 312–13.

103. *Id.* at 316.

104. *See* Peter B. Hoffman & James L. Beck, *Parole Decision-Making: A Salient Factor Score*, 2 J. CRIM. JUST. 195, 197 (1974) (describing the federal parole prediction method and explaining that “the ‘Burgess’ method was chosen because of its simplicity and ease of calculation in ‘field’ usage”); *see also* SIMON, *POOR DISCIPLINE*, *supra* note 10, at 172 n.3.

105. SIMON, *POOR DISCIPLINE*, *supra* note 10, at 173.

106. *See* Barbara Underwood, *Law and the Crystal Ball: Predicting Behavior with Statistical Inference and Individualized Judgment*, 88 YALE L. J. 1408, 1422 n.38 (1979); *see also* Hoffman & Beck,

that also focused more intensely on prior criminality. The first California “Base/Expectancy Score” narrowed in on four factors. One of the four factors was prior commitments; another was race; and the other two were offense type and number of escapes.<sup>107</sup> For its part, after having a leadership role in developing actuarial parole guidelines, Illinois ultimately abolished parole release and adopted determinate sentencing in the late 1970s.

## B. The Federal Sentencing Guidelines

The refinement of actuarial models in the parole context was interrupted in the 1970s, as many states turned away from indeterminate sentencing toward fixed sentencing guidelines. Nevertheless, the period reflects some continuity in the development of actuarial methods insofar as most of the guidelines that were developed in the period focused primarily on prior criminal history.

The idea of a commission that would fix sentencing guidelines is one of the only surviving models of the massive reforms that took place in the 1970s. In addition to parole guidelines, other ideas included voluntary sentencing guidelines, which were developed in most states by the early 1980s but subsequently abandoned in most places (except Delaware, Michigan, Utah, Virginia and Wisconsin), and statutory determinate sentencing schemes, which were developed in states such as California, Illinois, and Indiana, but were not popular in subsequent years.<sup>108</sup> As Michael Tonry suggests: “After nearly two decades of experimentation, the guideline-setting sentencing commission is the only reform strategy that commands widespread support and continues to be the subject of new legislation.”<sup>109</sup> The turn to fixed sentencing guidelines grew, in part, out of the development of parole sentencing guidelines in states such as Illinois, Minnesota, Oregon, and Washington (which later repealed them in favor of sentencing guidelines).

At the federal level, the sentencing guidelines were the product of a contentious process within an institution—the federal sentencing commission—which can only be described as an “organization in disarray.”<sup>110</sup> The commission had no particular strategy for developing guidelines and, as a result, different commissioners went off in different directions trying to develop their own ideas for a guideline system. Commissioner Paul Robinson tried to develop a system based on “detailed comparative assessments of offenders’ culpability” which focused first on offense elements (mental and physical components) and then on a complicated scheme of incremental punishment units relying, in part, on the squared and cubed root of property values.<sup>111</sup> This, the commission found,

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*supra* note 104, at 197–200 (describing nine factors used since November 1, 1973, when it replaced earlier version).

107. See SIMON, *supra* note 10, at 173.

108. See TONRY, SENTENCING, *supra* note 7, at 27–28.

109. *Id.* at 28.

110. See *id.* at 84.

111. *Id.* at 86.



was “unworkable.”<sup>112</sup> The commission wrote: “The Commission’s early efforts, which were directed at devising such a comprehensive guideline system, encountered serious and seemingly insurmountable problems. The guidelines were extremely complex, their application was highly uncertain, and the resulting sentences often were illogical.”<sup>113</sup> Too much complexity, the commission noted, would make the guidelines unworkable, and would undermine fairness since the different variables might interact in unexpected ways. The commission explained:

Complexity can seriously compromise the certainty of punishment and its deterrent effect. The larger the number of subcategories, the greater the complexity that is created and the less workable the system. Moreover, the factors that create the subcategories will apply in unforeseen situations and interact in unforeseen ways, thus creating unfairness. Perhaps most importantly, probation officers and courts, in applying a complex system of subcategories, would have to make a host of decisions about whether each of the large number of potentially relevant sentencing factors applied. This added fact-finding would impose a substantial additional burden on judicial resources. Furthermore, as the number and complexity of decisions that are required increases, the risk that different judges will apply the guidelines differently to situations that in fact are similar also increases. As a result the very disparity that the guidelines were designed to eliminate is re-introduced.<sup>114</sup>

Even if it were administrable, the commission noted, a complex system could not be properly devised. “The list of potentially relevant sentencing factors is long; the fact that they can occur in multiple combinations means that the list of possible permutations of factors is virtually endless. . . . The introduction of crime-control considerations makes the proper interrelationship among sentencing factors even more complex.”<sup>115</sup>

Commissioners Michael Block and Ilene Nagel tried to devise a different set of guidelines based on research on deterrence and incapacitation. “Penalties would be set that would either have optimal deterrent effects or cost-effectively incapacitate those at highest risk for future crimes.”<sup>116</sup> This, too, proved unsuccessful. The commission also considered but rejected a simpler, broad-category approach like those used in some states, which utilize a few simple categories and narrow imprisonment ranges. And it considered and rejected “employing specific factors with flexible adjustment ranges (e.g., one to six levels depending on the degree of damage or injury).”<sup>117</sup>

By the time the commission rejected the Robinson proposal and then abandoned two subsequent drafts, time was running out. According to Andrew von Hirsch, “It was only in the winter of 1986 that other commissioners were drawn actively into the process. The final draft was written at a late date in some haste

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112. U.S. SENTENCING COMM’N, SUPPLEMENTARY REPORT ON THE INITIAL SENTENCING GUIDELINES AND POLICY STATEMENTS 13 (June 18, 1987) [hereinafter SUPPLEMENTAL REPORT].

113. *Id.* at 14.

114. *Id.* at 13.

115. *Id.* at 13–14.

116. TONRY, SENTENCING, *supra* note 7, at 87.

117. SUPPLEMENTAL REPORT, *supra* note 112, at 14.

to meet the submission deadline.”<sup>118</sup> The commission ultimately opted for a system that focuses primarily on level of offense and prior criminal record, with few additional variables, to achieve the twin objectives of uniformity and proportionality—uniformity among similar criminal conduct by similar offenders, and proportionality between different types of offenses. What the federal commission adopted, in effect, were a few “key compromises”<sup>119</sup> between different approaches: a system that permits sentencing ranges, rather than precise sentences, identified by different levels of seriousness (from level one to level forty-three) and criminal history, but ranges that are confined to a narrow band (the maximum of the range cannot exceed the minimum of the range by more than the greater of six months or 25%).

With regard to empirical analysis, the federal sentencing guidelines were based loosely on statistical analyses used to estimate current sentencing practices. The commission, in effect, began its final approach by trying to ascertain “typical past practice.”<sup>120</sup> As former commissioner Stephen Breyer explains, the commission “decided to base the Guidelines primarily upon typical, or average, actual past practice. The distinctions that the Guidelines make in terms of punishment are primarily those which past practice has shown were actually important factors in pre-Guideline sentencing.”<sup>121</sup> The commission did not create a statistical model to replicate judicial decision making, but instead used a basic averaging approach to estimate existing sentencing practices along certain variables.

In terms of empirical data, the commission relied primarily on estimates of current practices focusing on a small number of relevant variables. The actual methodology is somewhat mysterious; the methodological appendix to the sentencing guidelines does not meet social science standards and seems almost deliberately intended to obfuscate discussion of the methods used.<sup>122</sup> Surprisingly little has been written about the scientific method, and most of the discussions rely entirely on the *Supplemental Report*. That report, when pieced together, reveals the following:

The data set consisted of detailed data regarding about 10,500 convictions as well as less detailed data regarding about 100,000 convictions. The Administrative Office of the United States Courts provided the basic data, which con-

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118. Quoted in TONRY, SENTENCING, *supra* note 7, at 88.

119. See generally Stephen Breyer, *The Federal Sentencing Guidelines and the Key Compromises Upon Which They Rest*, 17 HOFSTRA L. REV. 1 (1988).

120. *Id.* at 7.

121. *Id.*

122. In fact, the Supplemental Report has a number of inconsistencies. At page nine for instance, we are told that the research staff used “summary reports of 40,000 federal convictions and a sub-sample of 10,000 augmented presentence reports.” At page sixteen, the report indicates that the data contained “detailed data drawn from more than 10,000 presentence investigations, [and] less detailed data on nearly 100,000 federal convictions during a two-year period.” At page twenty-one, it refers to presentence reports from a sample of 10,500 cases. And at page twenty-two, the report indicates that the data essentially consisted of “40,000 defendants convicted during 1985.” The Report never bothers to clarify the exact size of the detailed and less detailed data sets.

sisted of all defendant records—felony and misdemeanor—leading to convictions from (apparently) mid-1983 to late 1985 that were in the Federal Probation Sentencing and Supervision Information System. The basic information included in this data consisted of offense description, defendant's background and criminal record, case disposition (trial or appeal), and sentence. A sample of 11,000 defendants from approximately 40,000 defendants convicted in fiscal year 1985 was then taken, and the data for 10,500 of those cases were supplemented with additional information concerning (1) the corresponding pre-sentence investigation reports and (2) the actual or likely sentence to be served.

The commission then posed several questions of the data:

How much time on average is served currently by convicted federal defendants? How does this average vary with characteristics of the offense, the background and criminal history of the defendant, and the method of disposition? How much of the variation about these averages cannot be attributed to the crime and the defendant; that is, how disparate is sentencing? What is the rate at which defendants are returning to prison following a parole revocation? How long do defendants remain in prison following revocation?<sup>123</sup>

The key question—referred to as the “baseline question”—concerned the sentence of a first time offender who was convicted at trial. Naturally, there were few of those in the data set. So the commission used standard multivariate statistical analysis<sup>124</sup> to draw inferences about the sentences received by first-time defendants convicted at trial.<sup>125</sup> The commission developed two “levels tables” from the data that assisted them in setting guideline ranges. The first table is entitled “Estimated Time Served for Baseline Offenses: 1st Time Offenders, Sentenced to Prison, Adjusted for Good Time,” and, as its title suggests, gives the estimated length of sentences by offense and the estimated number of persons sentenced to prison. The second table, entitled “Estimated Level Adjustment,” reports the adjustments in estimated length of sentence associated with different aggravating or mitigating factors. The factors in the second table include the level of participation in the offense (leader or lesser role), whether a weapon was used, whether the crime involved additional planning, organized crime, hostage taking, infliction of injury, importation of drugs, blackmail, planned or permanent injury; whether the institution or person victimized was a non-federal facility, the postal service, a government victim, an especially vulnerable victim or a law enforcement officer; whether the defendant cooperated, pled guilty, was a drug user, was unusually cruel, or perjured himself; and whether the defendant generated income primarily from crime.

The other important dimensions that were studied and incorporated into the guidelines were prior criminal history and plea bargaining. The commission studied the impact of prior criminal history on predicted sentences, as well as other instruments used to predict recidivism, such as the United States Parole

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123. SUPPLEMENTAL REPORT, *supra* note 112, at 22.

124. Multivariate maximum likelihood estimation.

125. SUPPLEMENTAL REPORT, *supra* note 112, at 23.

Commission's Salient Factor Score and the Proposed Inslaw Scale for Selecting Career Criminals for Special Prosecutions.<sup>126</sup> Drawing on these measures, the commission then developed certain ranges of criminal history—called Criminal History Categories. With regard to plea agreements, the commission empirically studied the effect on actual sentences, finding that a guilty plea lowers the sentence 30 to 40 percent on average. This average varies with the type of offense.<sup>127</sup> The commission provided for a limited reduction in sentence often associated with a guilty plea. This is the “acceptance of responsibility” factor which is sometimes, but not necessarily, tied to pleading guilty—most often when there is no charge reduction from a plea agreement. In addition, the commission allowed parties to enter into plea agreements that, if accepted by the sentencing court, would permit sentences in a specific range.<sup>128</sup>

The commission used the average sentences (conditioned on the percentage of persons actually sentenced to prison) as the basis for their final deliberations.<sup>129</sup> The results of these two tables, the commission explains, “are empirically-based estimates.”<sup>130</sup> They used the empirical evidence to make decisions about what seemed prevalent and what seemed less acceptable. As the commission explains:

The Commission did not simply copy estimates of average current sentences as revealed through analysis of the data. Rather, it used the results of analyses of current practice as a guide, departing at different points for various important reasons. The guidelines represent an approach that begins with and builds upon empirical data, but does not slavishly adhere to current sentencing practices.<sup>131</sup>

The commission then made political choices. The commission “raised substantially” the sentences for crimes involving actual (rather than merely threatened) violence, such as murder, aggravated assault, and rape.<sup>132</sup> Although the data revealed considerably lower sentences for robbery of an individual than for bank robbery, the commission did not find a good rationale for the disparity and made little distinction in the guidelines. Though the data revealed lower sentences for white-collar offenses (embezzlement, fraud, and tax evasion) than

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126. *Id.* at 43.

127. *Id.* at 48.

128. *See id.* at 49.

129. *See id.* at 21 (“The sentencing Commission used Tables 1(a) and 1(b) during its final deliberations. Earlier results of similar analyses presented in other forms, were used in drafting some of the guidelines. Presentence investigation reports were reviewed when the picture from the statistical analysis was unclear.” The Commission also used the U.S. Parole Guidelines and averages from the Parole Commission). The Commission emphasizes, but rarely develops in detail, the claim that it used other sources as well. *See id.* at 23 n.65 (“Many other data sources were also utilized.”).

130. SUPPLEMENTAL REPORT, *supra* note 112, at 22.

131. *Id.* at 17; *see also id.* at 22 (“The information derived provided a numerical anchor for guideline development. Along with other information at the Commission’s disposal, the analysis of current practices suggested factors for consideration as guideline ingredients. It also made it possible to test the significance of other factors proposed for inclusion in the guidelines.”); *id.* at 23 (“The statistical analysis provided the Commission with a meaningful synopsis of current sentencing practices, revealing both practices that have strong acceptance and those that have weaker support. This analysis provided valuable material for policy deliberations.”).

132. *Id.* at 19.

for larceny, the commission decided to ignore the disparities and treat them essentially identically. Also, in light of the Anti-Drug Abuse Act, the commission imposed guidelines for drug offenses that “are much higher than in current practice.”<sup>133</sup> Moreover, to limit the influence of fact-finding, the commission limited the number of factual issues on which the guidelines depended. It decided to “focus on a relatively manageable number of frequently-occurring factors and to avoid an effort to attribute specific sentencing weight to every conceivable nuance.”<sup>134</sup> In most of these instances, the commission followed what it considered to be “expressed legislative intent” or “logical arguments.”<sup>135</sup>

In terms of departures from the sentencing guidelines, a wide range of individual characteristics were determined to be either not relevant or not ordinarily relevant to the determination whether to depart from the sentencing range. These included youth, education and vocational skills, mental and emotional conditions, physique, drug or alcohol dependance, employment record, family ties and responsibilities and community ties, race, sex, religion, socio-economic status, military, civic, charitable or public service, and “lack of guidance as a youth and similar circumstances indicating a disadvantaged upbringing.”<sup>136</sup>

Ultimately, the federal commission used actuarial methods for several purposes—in their words, “to describe specific characteristics of offenses and offenders who are convicted in federal court; to test the application of the guidelines to actual cases; to predict the impact of the guidelines on federal prison population and other components of the federal criminal justice system; and to monitor the use of the guidelines by the federal courts”<sup>137</sup>—but the primary use of statistics in the context of deciding on sentencing ranges was to estimate present practice in order to allow for political choice.

133. *Id.* at 18.

134. *Id.* at 46 (noting in fn. 78 that “the sentencing factors also tend to be those that are closely tied to elements of the offense (*e.g.*, nature of injury, amount of loss), thus ensuring that evidence relating to them will be adduced in the event of a trial”).

135. SUPPLEMENTAL REPORT, *supra* note 112, at 18, 19. For those not familiar with the federal sentencing guidelines, what the commission developed, in brutal simplicity, is a system that works as follows:

1. First, you determine a base level for the applicable offense, making sure to include any offense-specific characteristics (such as adjustments for the amount of money involved, the age of the victim, the amount of harm, whether a dangerous weapon was used, whether it was government property, etc.);
2. then you adjust the level based on factors involving the victim (hate crime, official victim, restraint of victim, or terrorism); the role of the defendant (organizer and leader or minimal participant); whether there was any obstruction of justice; and whether the defendant has accepted responsibility for the crime;
3. you determine the defendant’s criminal history category, and find the proper guideline range corresponding to the offense level and criminal history category;
4. then you determine whether to depart from the guideline range, and whether other options related to probation, supervision, fines or restitution apply.

136. Guideline Manual, Chapter 5, Part H, Sec. 5H1.1–5H1.12; *see generally* TONRY, SENTENCING, *supra* note 7, at 22; Stephen J. Schulhofer, *Assessing the Federal Sentencing Process: The Problem is Uniformity, Not Disparity*, 29 AM. CRIM. L. REV. 833 (1992).

137. SUPPLEMENTAL REPORT, *supra* note 104, at 9.

One important caveat is in order. There is good evidence that some federal prosecutors and defendants have been deliberately evading the guidelines through plea negotiations. Federal criminal litigation is characterized by massive plea bargaining—both fact bargaining, which is expressly condemned by the federal sentencing guidelines,<sup>138</sup> and charge bargaining, which is far more common—that significantly erodes any possibility of a “scientific” process. As Ilene Nagel and Stephen Schulhofer have shown, judges and prosecutors do circumvent the federal guidelines through plea bargaining. Nagel and Schulhofer conducted an empirical study of three federal districts and found rates of possible guideline circumvention through charge, fact, or factor bargaining of about 11%, 25% (or more), and 6% to 8% respectively.<sup>139</sup> Given that plea negotiations resolve such a large percentage of federal cases (88% in 1990<sup>140</sup>), there is a lot of room for manipulation. What this suggests, of course, is that any reliance on empirically-based estimates of past practice is even further eroded—above and beyond the significant political choices made.

While this second case study has centered on the federal guidelines, it is important to note that most of the state guidelines and sentencing mechanisms also use two-dimensional grids that focus primarily on the same two factors—severity of the crime and prior criminal history. As Michael Tonry explains:

Reduced to their core elements, all sentencing guidelines grids are fundamentally the same: two-dimensional tables that classify crimes by their severity along one axis and criminal records by their extent along the other. Applicable sentences for any case are calculated by finding the cell where the applicable criminal record column intersects with the applicable offense severity row. Guidelines grids vary in details. Although most divide crimes into ten or twelve categories, some use more. . . . They vary in ornateness. Although most, like Washington’s, provide a range of presumptive sentences such as “twenty-one to twenty-seven months” for any offense severity/criminal record combination, those in North Carolina (1994) and Pennsylvania (1994) contain a range for “ordinary cases” and separate ranges for cases in which aggravating or mitigating considerations are present. Finally, they vary in severity.<sup>141</sup>

Moreover, like the federal commission, most of the state commissions have also designed and adopted normative guidelines intended to change current sentencing practice, rather than descriptive guidelines intended to replicate existing practice with greater consistency.<sup>142</sup>

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138. See United States Sentencing Guidelines Section 6B1.4(a)(2).

139. See Ilene H. Nagel & Stephen J. Schulhofer, *A Tale of Three Cities: An Empirical Study of Charging and Bargaining Practices Under the Federal Sentencing Guidelines*, 66 S. CAL. L. REV. 501, 526, 534, 542 (1992). See also Stephen J. Schulhofer & Ilene Nagel, *Negotiated Pleas under the Federal Sentencing Guidelines: The First Fifteen Months*, 27 AM. CRIM. L. REV. 231 (1989) (reporting how, in fifteen months following implementation of federal guidelines, guidelines circumvented in an identifiable minority of cases resolved by guilty plea; however, preliminary analysis involves small number of cases and informal research methods).

140. See Nagel & Schulhofer, *supra* note 139, at 553.

141. TONRY, SENTENCING, *supra* note 7, at 15.

142. *Id.* at 49.

### C. Criminal Profiling

Criminal profiling emerged as a formal law enforcement tool in the mid-twentieth century in the United States. One of the first well-known uses of criminal profiling was the hijacker profiles developed in the 1960s to disrupt the hijacking of American planes. The Federal Aviation Administration put in place a hijacker profile beginning in October 1968. The profile was based on a detailed study of the known characteristics of identified airline hijackers, and it highlighted approximately twenty-five characteristics, primarily behavioral.<sup>143</sup> Criminal profiling became more frequent in the 1970s with drug-courier profiles and alien smuggling profiles.<sup>144</sup> The list of profiles that have been developed is long, and includes many crime-specific profiles like the “drug smuggling vessel profile, the stolen car profile, the stolen truck profile, the alimentary-canal smuggler profile, the battering parent profile, and the poacher profile.”<sup>145</sup>

There are several different types of criminal profiling mechanisms, and they can be arrayed along several dimensions.<sup>146</sup> One dimension has to do with the type of data upon which the profiles are based. Some profiles are derived from external, observable characteristics that are identifiable in law enforcement reports and arrest records: clothing, hair-style, facial hair, demeanor, nervousness, luggage, etc. The drug-courier profile is an example of this type. Other profiles are based primarily on psychological data: mental health and counseling reports, analyses of family and social relationships, interviews of friends and family. The school shooter threat assessment model and serial killer profiles fit in this category. Another dimension has to do with the timing of the profile—whether the profile is assembled *ex ante* from previous arrests in order to identify future suspects for investigation, or whether the crime has been committed and a profile is being assembled from the known facts to identify a suspect. Drug-courier profiling fits in the first category. An ongoing homicide investigation might fit in the second, particularly where a serial killer profile is being developed from the evidence. It is possible to categorize these different types of profiling in a two-way matrix:

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143. The “hijacker profile,” which would trigger an examination with a magnetometer, was discontinued in 1973 when the FAA required all passengers to go through metal detectors. In 1980, however, the FAA started using the profile again in order to target suspects bringing gasoline on board planes. See generally HARRIS, *supra* note 39, at 10–11, 17–26; J. MONAHAN & L. WALKER, *SOCIAL SCIENCE IN LAW: CASES AND MATERIALS* 404–437 (5th ed. 2002); Charles L. Becton, *The Drug Courier Profile: ‘All Seems Infected That Th’ Infected Spy, As All Looks Yellow to the Jaundic’d Eye*, 65 N.C. L. REV. 417, 423 n.45; John T. Dailey, *Development of a Behavioral Profile for Air Pirates*, 18 VILL. L. REV. 1004, 1008 (1973); Heumann & Cassak, *supra* note 38; McGinley & Downs, *Airport Searches and Seizures—A Reasonable Approach*, 41 FORDHAM L. REV. 293, 302–03 (1972).

144. See generally, HARRIS, *supra* note 39, at 10–11, 17–26.

145. Becton, *supra* note 143, at 424–425.

146. Some commentators use the term “criminal profiling” to refer exclusively to criminal suspect profiling—the type of reactive, after-the-crime type of profiling intended to create a profile of a suspect. See Heumann & Cassak, *supra* note 38, at 915–19. I am referring to criminal profiling here as the umbrella category.

TABLE 3:  
PROFILING MATRIX

	Mental	Physical
<i>Ex ante</i>	School shooter	drug-courier
<i>Ex post</i>	Homicide investigation	Witness ID

### 1. *The Drug-Courier Profile*

The drug-courier profile is one of the more prominent examples of a criminal profile. The profile was developed through DEA agents' experience, and it reflects, in this sense, a product of a combination of clinical and statistical findings, but not statistical in a fancy sense. It consists of personal observations from a large number of cases involving subjective judgment built over many years. "In theory, the drug courier profile seeks to incorporate the subjective judgments of experienced narcotics agents into a statistical model that uses predetermined profile characteristics based on an analysis of prior cases."<sup>147</sup> In practice, it is far less statistical, and far more judgmental.

The drug-courier program was first implemented at the Detroit airport in the fall of 1974. Between 1976 and 1986 there were in excess of 140 reported decisions involving DEA stops of passengers at airports based on the drug-courier profile.<sup>148</sup> The profiles used in the first experiment in Detroit were based on "empirical data gathered during eighteen months surveillance at Detroit Metropolitan Airport,"<sup>149</sup> and they focused on the conduct and appearance of travelers. "Before developing the drug courier profile, DEA agents learned the *modus operandi* of cross-country drug distributors and couriers through conversations with undercover operators, informants, and cooperative defendants—those arrested on drug charges as well as convicted codefendants who turned state's evidence."<sup>150</sup> Most of the evidence about these profiles comes from litigation on motions to suppress or for selective enforcement. The information, though, was not made public but was reviewed *in camera* so as not to disclose the behavioral model that the DEA agents had developed.<sup>151</sup>

Most students of the drug-courier profile trace it back to two former DEA agents, John Marcello and Paul Markonni, who are considered the "Godfa-

147. Becton, *supra* note 143, at 429–430.

148. *See id.* at 417 n.2, 417–418.

149. *Id.* at 430 n.72.

150. *Id.* at 426.

151. *See id.* at 430 n.72.



thers” of the profile.<sup>152</sup> They and other DEA agents started identifying the common characteristics of illegal drug couriers in airports. Much of this started on tips from informants or airline personnel.

As DEA Agent Markonni explained in *United States v. McClain*, “[t]he majority of our cases, when we first started, involved cases we made based on information from law enforcement agencies or from airline personnel. And as these cases were made, certain characteristics were noted among the defendants.”<sup>153</sup>

The airplane-highjacker profile was also an important source of information, because stops based on that profile often netted persons in possession of drugs.<sup>154</sup>

“At some point in time the DEA apparently undertook a nationwide effort to draw a composite picture of those persons likely to carry illegal drugs.”<sup>155</sup> This effort was not successful. As the United States government declared in its petition for certiorari filed with the Supreme Court in the *Mendenhall* case, “there is no national [drug-courier] profile; each airport unit has developed its own set of drug courier characteristics on the basis of that unit’s experience. . . . Furthermore, the profile is not rigid, but is constantly modified in light of experience.”<sup>156</sup>

The drug-courier profile has become familiar today. In the *Mendenhall* case, for example, the female defendant was stopped in part on the basis of the following:

The agent testified that the respondent’s behavior fit the so-called “drug courier profile”—an informally compiled abstract of characteristics thought typical of persons carrying illicit drugs. In this case the agents thought it relevant that (1) the respondent was arriving on a flight from Los Angeles, a city believed by the agents to be the place of origin for much of the heroin brought to Detroit; (2) the respondent was the last person to leave the plane, “appeared to be very nervous,” and “completely scanned the whole area where [the agents] were standing”; (3) after leaving the plane the respondent proceeded past the baggage area without claiming any luggage; and (4) the respondent changed airlines for her flight out of Detroit.<sup>157</sup>

Several scholars, David Cole in particular, have compiled lists of the drug-courier profile characteristics, which are often internally contradictory.<sup>158</sup> With time, the profiles have proliferated. As Charles Becton explains:

Not only does each airport have a profile, but a single DEA agent may use multiple profiles of his or her own. Paul Markonni, the person most often credited with developing the drug courier profile, and clearly the agent most often listed in drug courier profile cases, has articulated several slightly varying profiles in reported cases. One court has used different profiles for incoming and outgoing flights. The United States Court of Appeals for the Ninth Circuit in *United States v. Patino* made reference to a “female” drug courier profile. The United States Court of Appeals for the Fifth Cir-

152. HARRIS, *supra* note 39, at 20; Becton, *supra* note 143, at 426, 433–434.

153. Becton, *supra* note 143, at 426.

154. *See id.* at 426–427.

155. *Id.* at 427.

156. Pet. Cert. at 17–18 n.17 (quoted in Becton, *supra* note 143, at 433).

157. *U.S. v. Mendenhall*, 446 U.S. 544, 547 n.1.(1980)

158. *See, e.g.,* DAVID COLE, NO EQUAL JUSTICE: RACE AND CLASS IN THE AMERICAN CRIMINAL JUSTICE SYSTEM 48–49 (1999); Becton, *supra* note 143, at 421.

cuit referred to a regional profile in *United States v. Berry*, and a profile associated with particular agents in *United States v. Elmore*. And, contributing to the proliferation of the drug courier profile, state and local law enforcement agencies have instituted their own profile programs.<sup>159</sup>

How much credence should we give these drug-courier profiles? On this question opinions differ widely. According to Justice Powell, concurring in *Mendenhall*, the drug-courier profile is a “highly specialized law enforcement operation.”<sup>160</sup> In the *per curiam* opinion in *Reid*, the Court referred to the drug-courier profile as “a somewhat informal compilation of characteristics believed to be typical of persons unlawfully carrying narcotics.”<sup>161</sup> Chief Justice Rehnquist has referred to the profile as “the collective or distilled experience of narcotics officers concerning characteristics repeatedly seen in drug smugglers.”<sup>162</sup> According to David Cole, the drug-courier profile “simply compiles the collective wisdom and judgment of a given agency’s officials. Instead of requiring each officer to rely on his or her own limited experience in detecting suspicious behavior, the drug-courier profile gives every officer the advantage of the agency’s collective experience.”<sup>163</sup>

In 1982, the National Institute of Justice—the research arm of the Department of Justice—conducted a systematic study of the drug-courier profile.<sup>164</sup> The study required DEA agents to fill out a report for all encounters they instigated and a log of passengers observed during an eight-week period in 1982. Of about 107,000 passengers observed, the participating agents approached 146. According to the report, most of the encounters (120 of the total 146) were triggered by a combination of behavioral and demographic peculiarities of the passengers—what we can call matches to a profile. The results were as follows:<sup>165</sup>

TABLE 4:  
PASSENGER OBSERVATIONS

	Number	Percentage
Total passengers	146	100%
No search after questioning	42	29%
Consent searches	81	55%
Searches with warrant or incident to arrest	15	10%

159. Becton, *supra* note 143, at 433–434.

160. *U.S. v. Mendenhall*, *supra* note 157, at 562 (Powell, J., concurring, joined by Burger, C.J., and Blackmun, J.).

161. *Reid v. Georgia*, 448 U.S. 438, 440 (1980) (*per curiam*).

162. *Florida v. Royer*, 460 U.S. 491, 507 (1983).

163. COLE, *supra* note 158, at 47.

164. See EDWIN ZEDLEWSKI, THE DEA AIRPORT SURVEILLANCE PROGRAM: AN ANALYSIS OF AGENT ACTIVITIES (1984) (reported in MONAHAN & WALKER, *supra* note 143, at 425–26).

165. *Id.*

Contraband found or other evidence of crime	49	34%
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## 2. *The School Shooter Threat Assessment*

The architects of the school shooter threat assessment model emphatically stress that it is *not* a criminal profile. On the first page of the FBI Report titled *The School Shooter: A Threat Assessment Perspective*, the FBI states: “This model is not a ‘profile’ of the school shooter or a checklist of danger signs pointing to the next adolescent who will bring lethal violence to a school. Those things do not exist . . . .”<sup>166</sup> “[T]rying to draw up a catalogue of ‘checklist’ or warning signs to detect a potential school shooter can be shortsighted, even dangerous,” the FBI emphasizes. “Such lists, publicized by the media, can end up unfairly labeling many nonviolent students as potentially dangerous or even lethal.”<sup>167</sup> Janet Reno echoes the caution label: the model must be used “judiciously,” given that “the risk of unfairly labeling and stigmatizing children is great.”<sup>168</sup> Nevertheless, the school shooter threat assessment model is a method to determine the seriousness of school threats that depends in large part on a four-prong analysis of the personality traits and relationships of the threatening youth—in other words, on a profile of the more likely school shooter. As Janet Reno explains, the Report contains “a chapter on key indicators that should be regarded as warning signs in evaluating threats.”<sup>169</sup> These key indicators amount, effectively, to a profile.

The school shooter model is based on an empirical case-study approach. The National Center for the Analysis of Violent Crime (“NCAVC”) developed the model as a way to study school shooters “from a behavioral perspective.”<sup>170</sup> The NCAVC worked with law enforcement officers, school teachers and administrators, mental health professionals, and “experts in disciplines including adolescent violence, mental health, suicidology, school dynamics, and family dynamics.”<sup>171</sup> The model was based primarily on an analysis of eighteen school-shooting cases from across the United States—including fourteen cases in which shootings occurred and four cases of planned and prepared, but prevented shootings. In addition, the analysts considered an undisclosed number of cases in which a threat assessment was being prepared. The data consisted of information provided by the school and law enforcement officials, including summary investigative reports, interviews of the offenders, witness statements,

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166. U.S. DEP’T OF JUSTICE, FEDERAL BUREAU OF INVESTIGATION, *THE SCHOOL SHOOTER: A THREAT ASSESSMENT PERSPECTIVE*, at 1, available at <http://www.fbi.gov/publications/school/school2.pdf> [hereinafter *SCHOOL SHOOTER*] (last visited May 5, 2003).

167. *Id.* at 2; see also *id.* at 15.

168. *Id.* at iii.

169. *Id.* at iii (emphasis added).

170. *Id.* at 2.

171. *Id.* at 2.

interviews with people who knew the offenders and families, crime scene photographs and videos, counseling and psychiatric reports, examples of the offenders' writings, drawings, essays, letters, poems, songs, videos and tapes, school records and school work of the offenders, trial psychiatric reports, and "other pertinent case materials."<sup>172</sup>

How then does the model work? The model focuses first on the type of threat presented—whether it is a direct specific threat with highly plausible details identifying the potential victims and locations, or, at the other extreme, a vague and indirect threat with inconsistent or implausible details and content that suggests that the student is unlikely to carry it out. Next, the model proposes a four-prong assessment of the student making the threat, focusing on the personality of the student, and the family, school and social dynamics surrounding the youth. The model lists "warning signs" in these four categories—traits or circumstances that might lead an assessor to believe that the threat is credible.

In terms of prong one—personality traits and behavior—the list includes such things as "leakages," which reveal clues to violent or macabre feelings or fantasies, "low tolerance for frustration," "poor coping skills," "lack of resilience," "failed love relationship," "nurs[ing] resentment over real or perceived injustices," "signs of depression," "narcissism," "alienation," "lack of empathy," "attitude of superiority," "exaggerated or pathological need for attention," "intolerance," "inappropriate humor," "lack of trust," "change of behavior," or being "rigid and opinionated."<sup>173</sup> In terms of prong two—family dynamics—the list includes "turbulent parent-child relationship," parental "acceptance of pathological behavior," "lack of intimacy" within the family, "few or no limits on the child's conduct," or "no limits or monitoring of TV or Internet."<sup>174</sup> The third prong—school dynamics—includes the student's being detached from school, bullying and inequitable discipline as part of the school culture, or a prevalent "code of silence" among the students.<sup>175</sup> Finally, the fourth prong—social dynamics—includes a violent or extremist peer group, drug and alcohol use, or a "copycat behavior" that may mimic school violence elsewhere.<sup>176</sup>

In terms of interventions, the Report strongly suggests that schools form multidisciplinary threat assessment and management teams which include law enforcement. "*It is strongly recommended that a law enforcement representative should either be included as a member of the team or regularly consulted as a resource person,*" the Report emphasizes.<sup>177</sup> In the case of a high-level threat—determined in part on the basis of the four prong investigation—the Report recommends that the school should immediately inform the appropriate law

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172. SCHOOL SHOOTER, *supra* note 166, at 35; *see generally id.* at 34–35.

173. *Id.* at 16–20.

174. *Id.* at 21–22.

175. *Id.* at 22–23.

176. *Id.* at 24.

177. *Id.* at 26 (emphasis in original).

enforcement agency “almost always;” for medium level threats, “in most cases;” and for low level threats, sometimes.<sup>178</sup>

In sum, here is how the model works:

Here is how the Four-Pronged Assessment Model can be used when a threat is received at a school: A preliminary assessment is done on the threat itself, as outlined in the preceding chapter [i.e. whether direct and specific or vague threat]. If the threatener’s identity is known, a threat assessor quickly collects as much information as is available in the four categories [personality, family, school and social dynamics]. The assessor may be a school psychologist, counselor, or other staff member or specialist who has been designated and trained for this task. Information can come from the assessor’s personal knowledge of the student or can be sought from teachers, staff, other students (when appropriate), parents, and other appropriate sources such as law enforcement agencies or mental health specialists.

If the student appears to have serious problems in the majority of the four prongs or areas and if the threat is assessed as high or medium level, the threat should be taken more seriously and appropriate intervention by school authorities and/or law enforcement should be initiated as quickly as possible.<sup>179</sup>

When the threat assessment model was unveiled, some commentators expressed concern about potential misuse of the data.<sup>180</sup> Despite the caution labels, newspaper accounts suggest that there have been some inappropriate uses of the method.<sup>181</sup> The model nevertheless continues to be influential as a way to assess school threats and has generated more research on psychological profiling.

These case studies suggest that the actuarial models deployed in criminal law evolved over the course of the twentieth century and, particularly in the parole and sentencing area, focused increasingly on the prior criminal history of the accused. The development of parole is a story of actuarial aspirations, clinical realities by default, displaced by a multi-factored test, and leading to a narrower and narrower actuarial model. In the context of indeterminate sentencing, the model gradually shifted from trying to find the most appropriate rehabilitative remedy, which is extremely hard to operationalize, to using probabilities to predict success or failure on parole, which is more easily operation-

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178. SCHOOL SHOOTER, *supra* note 166, at 27.

179. *Id.* at 10–11.

180. For expressions of concern about the possible negative unintended consequences of the model, see Scott S. Greenberger, *FBI Lists Traits of Violent Students Report Examines Youth Shootings*, BOSTON GLOBE, Sept. 7, 2000, at B4 (Vincent Schiraldi of the Justice Policy Institute, a Washington research group that focuses on juvenile justice issues, noted that there is potential for overreaction: “If this gets used inappropriately, it’s not a stretch to imagine school principals coming up with lists of the 10 most dangerous kids”); Eric Lichtblau, *FBI Urges Educators to Spot Signs of Violence; Crime Experts are Skeptical the Report Adds much to the Ongoing Debate over How to Stop School Shootings*, L.A. TIMES, Sept. 7, 2000, at A18 (one psychology scholar, Laurence Steinberg of Temple University, argued that the Report may be “an open invitation to stigmatize children who may simply be expressing opinions they are entitled to have”).

181. According to newspaper reports, an 11th grade honors student was suspended based on a stream-of-consciousness journal that possessed “angst, guilt, bravado, and self-pity,” and another honors student was expelled for “threatening artwork” in the form of a poem in which a “madman” reacts to the murder of his dog. See Robyn Blumner, *Whose Constitutional Rights at Risk of Being Trampled?* MILWAUKEE JOURNAL SENTINEL, Dec. 19, 2000, at 19A (also appears in the Editorial Section of the *Chicago Sun–Times*, Dec. 18, 2000 and the *St. Petersburg Times*, Dec. 17, 2000).

alized, to narrowing in on one key factor, prior criminal history, which is the easiest model to operationalize. This evolution is reflected in the progress from the writings of Professors Paul Freund and Roscoe Pound, to the research and model of Professor Ernest Burgess, to the Salient Factor Score. The formalization and narrowing of parole guidelines had an important influence on the development of sentencing guidelines, which continued to narrow the focus of the actuarial model to the severity of crime and prior criminal history. The development of criminal profiling in the mid-twentieth century reflects another effort to use a quasi-actuarial approach based on mixed statistical and clinical methods to predict criminal behavior. It reflects another tool which—like the later parole and sentencing guidelines—is aimed narrowly at observable conduct and visible attributes associated with crime.

Overall, the actuarial models were and remain primitive in the criminal law. They reflect basic probability assessments and straightforward statistical models. They are not highly sophisticated and, most often, are overshadowed by political choices. In the end, the net effect of the evolution of the actuarial in criminal law has been to train criminal law increasingly on the narrow question of prior criminal history. The desire to know the criminal and to predict his criminality has had serious consequences for the way we think about and engage in law enforcement, sentencing and punishment.

#### IV

##### REFLECTING ON THE ACTUARIAL MODEL

The account I offer raises a number of questions. In this Part I would like to focus on one in particular: Is it possible that the refinement of the actuarial model in criminal law, in a world of scarce law enforcement resources, has contributed to the increasing racial imbalance in our carceral populations? The answer, I will suggest, is very possibly yes, under certain conditions that seem to characterize the existing field of criminal law, crime and punishment. These conditions include, first, limited law enforcement resources; second, an abundant supply of criminal activity; and third, relatively unreliable measures of natural offending rates, resulting in relatively heavy reliance on police data (arrests, informants, intelligence) to gauge the extent of street crime. Under these conditions, focusing on any one predictive factor is likely to compound the apparent effect of that factor on crime. In other words, if we identify a correlation between a group trait (gender, race, religion, background, criminal history, genes, etc.) and criminal activity, and then target our law enforcement interventions on the basis of that trait, the paradoxical effect may be that the correlation itself gets reinforced over time. This is true whether the profiling is perceived as legitimate or not—whether it is a response to differential offending rates or whether it reflects purely malicious selective enforcement. It may be true whether we are merely allocating limited law enforcement resources in direct proportion to the amount of crime associated with that group trait or engaging in deliberate discrimination.

This can be demonstrated with a simple computation, relying on a few basic assumptions about criminal profiling. For purposes here, I will use racial profiling as an illustration. I will define racial profiling as the explicit or implicit use of race in law enforcement decisions such as the decision to stop and investigate a suspect, or the decision to police a specific neighborhood. Race is used explicitly when it is expressly referred to as one among other criteria, such as when a police officer stops someone in part because she believes that members of that person's race are more likely to commit the crime under investigation.<sup>182</sup> With the exception of anti-terrorism policing, this has become increasingly hard to establish. For that reason, I also include an implicit definition of racial profiling. Race is used implicitly when law enforcement is being targeted toward a racial group in greater proportion than that group's representation in the population—such as, for instance, when police officers stop-and-frisk young black men in proportion to their purported contribution to crime rather than their representation in the general population. This reflects a disparate impact prong of racial profiling. It is more controversial insofar as many commentators would not necessarily consider it racial profiling. The point of my analysis, though, is precisely to demonstrate that even this second, possibly less controversial type of racial profiling, may be a self-confirming prophecy.

When an accusation of racial profiling is made, the justification for disproportionate enforcement often rests on two premises. The first is that members of certain racial groups offend at a disproportionately higher rate than their representation in the general population. This premise is reflected, for instance, in the argument that the racial disproportionality in admissions to state prisons does not reflect racial discrimination so much as differential involvement in crime (as measured principally by arrests). In articles in 1982 and 1993, Alfred Blumstein studied the racial disproportionality of the United States prison population and essentially concluded that “the bulk of the disproportionality is a consequence of the differential involvement by blacks in the most serious kinds of crime like homicide and robbery.”<sup>183</sup>

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182. For a definition of racial profiling along these lines, see Samuel R. Gross & Debra Livingston, *Racial Profiling Under Attack*, 102 COLUM. L. REV. 1413, 1415 (2002). This definition, as should be clear, includes the narrower case in which an individual is stopped solely because of his or her race. In line with social reality, it adopts the broader definition.

183. Alfred Blumstein, *Racial Disproportionality of U.S. Prison Populations Revisited*, 64 U. COLO. L. REV. 743, 759 (1993) (finding that overall approximately 76% of racial disproportionality in prisons in 1991 was attributable to differential arrest rates; also finding that the contribution of differential offending rates decreases with less serious crimes); see also Alfred Blumstein, *Criminology; On the Racial Disproportionality of United States' Prison Populations*, 73 J. CRIM. L. & CRIMINOLOGY 1259 (1982) (finding that approximately 80% of the racial disproportions in prison in 1979 were attributable to differential arrest rates); Patrick A. Langan, *Racism on Trial: New Evidence to Explain the Racial Composition of Prisons in the United States*, 76 J. CRIM. L. & CRIMINOLOGY 666, 682–683 (1985) (conducted a similar study in 1985 and concluded that “even if racism exists, it might explain only a small part of the gap between the 11% black representation in the United States adult population and the now nearly 50% black representation among persons entering state prisons each year in the United States”). For arguments challenging this proposition, especially the reliance on arrest statistics as evidence of offending, see HARRIS, *supra* note 39, at 76–78 (arguing that arrests measure police activity,

Blumstein's studies generated a tremendous amount of debate over the causes of racial disproportionality in prisons. Michael Tonry, in his book *Malign Neglect*, extensively reviews the literature and concludes, with one important caveat, that "[f]rom every available data source, discounting to take account of their measurement and methodological limits, the evidence seems clear that the main reason that black incarceration rates are substantially higher than those for whites is that black crime rates for imprisonable crimes are substantially higher than those for whites."<sup>184</sup> (The caveat is that, since 1980, the War on Drugs and other tough-on-crime measures deliberately contributed to the steady worsening of racial disparities in the justice system.) For present purposes, we need only observe that the justification for racial profiling often rests on the assumption of differential offending rates among different racial groups.<sup>185</sup>

The second premise is that if we discover disproportionate offending rates among a distinct group, it is only fair to target law enforcement resources in relation to their disproportionate contribution to crime rather than to their representation in the general population. In other words, if African Americans represent 25% of the general population, but 45% of the offending population, it is fair to expend about 45% of our law enforcement resources on African-American suspects or in African-American neighborhoods. This second premise is captured, for instance, in the argument that law enforcement officials engage in racial profiling "for reasons of simple efficiency. A policeman who concentrates a disproportionate amount of his limited time and resources on young black men is going to uncover far more crimes—and therefore be far more successful in his career—than one who biases his attention toward, say, middle-aged Asian women."<sup>186</sup> To do otherwise, some argue, would make no sense:

A racial-profiling ban, under which police officers were required to stop and question suspects in precise proportion to their demographic representation (in what? the precinct population? the state population? the national population?) would lead to *massive* inefficiencies in police work. Which is to say, massive declines in the apprehension of criminals.<sup>187</sup>

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not offending); *but see* TONRY, *MALIGN NEGLECT*, *supra* note 8, at 70–74 (arguing that arrests broadly reflect offending).

184. TONRY, *MALIGN NEGLECT*, *supra* note 8, at 79; *see also id.* at viii, 3, 50.

185. Those who oppose racial profiling, in fact, sometime accept this first premise. Randall Kennedy, for instance, writes "there's no use pretending that blacks and whites commit crimes (or are victims of crime) in exact proportion to their respective shares of the population. Statistics abundantly confirm that African Americans—and particularly young black men—commit a dramatically disproportionate share of street crime in the United States. This is a sociological fact, not a figment of the media's (or the police's) racist imagination." Randall Kennedy, *Suspect Policy: Racial Profiling Usually Isn't Racist; It Can Help Stop Crime; And It Should Be Abolished*. *NEW REPUBLIC*, Sept. 13, 1999, at 30.

186. John Derbyshire, *In Defense of Racial Profiling*, *NAT'L REV.*, February 19, 2001, at 38, *available at* <http://www.nationalreview.com/19feb01/derbyshire021901.shtml>.

187. *Id.*



Police officers who defend racial profiling often do so based on the disproportionate offending rates for certain crimes by certain members of minority groups.<sup>188</sup> So, in New York City for instance, former police commissioner Howard Safir justified the disproportionate stops of African Americans and Hispanics by pointing to the disproportionate racial breakdown of eye-witness identifications, arguing that allocating resources along those lines is not discriminatory. “The ethnic breakdown of those stopped-and-frisked in the city as a whole,” Safir emphasized, “*corresponds closely* with the ethnic breakdown of those committing crimes in the city.”<sup>189</sup> In the litigation concerning the New Jersey State Police and their practices of disproportionately stopping black drivers on the New Jersey Turnpike between 1988 and 1991, the State of New Jersey’s expert statistician attempted to prove that black drivers drive faster than whites, in an effort to justify the disproportionate number of law enforcement stops of black drivers.<sup>190</sup> In fact, even some opponents of racial profiling accept this second premise: “Racial selectivity of this sort,” Randall Kennedy writes, “can be defended on nonracist grounds and is, in fact, embraced by people who are by no means anti-black bigots and are not even cops.”<sup>191</sup>

A simple computation will show, however, that these two premises—if implemented in a world of scarce law enforcement resources and plentiful criminal activity—may be self-confirming and may lead to increasingly racially disproportional carceral populations.<sup>192</sup> Imagine a major metropolitan area like New York City with approximately eight million inhabitants, where 25% of the population is African American (I will refer to this group as “minority” or “minorities” and to the other 75% as “majority” or “majorities”).<sup>193</sup> Assume

188. See Dorothy E. Roberts, *Foreword: Race, Vagueness, and the Social Meaning of Order-Maintenance Policing*, 89 J. CRIM. L. & CRIMINOLOGY 775, 807 (1999).

189. See NYPD RESPONSE TO THE DRAFT REPORT OF THE UNITED STATES COMMISSION ON CIVIL RIGHTS—POLICE PRACTICES AND CIVIL RIGHTS IN NEW YORK CITY 13, available at <http://www.ci.nyc.ny.us/html/nypd/html/dclm/exsumm.html> (emphasis in original).

190. See *State of New Jersey v. Soto*, 734 A.2d 350, 354–55 (N.J. Super. 1996) (granting motions to suppress evidence on the ground of selective enforcement in violation of the equal protection clause).

191. Kennedy, *supra* note 185.

192. In all the following calculations, numbers are rounded and percentages are displayed to the second or third decimal point. The calculations themselves, however, have been performed by means of a computerized model and are based on exact percentages. This accounts for minor apparent discrepancies in the following tables. The central premise of this thought experiment—namely scarce law enforcement resources, plentiful criminal activity, and unreliable measures of natural offending rates—reflects an assumption of extremely low elasticity of crime to policing, which is what differentiates this thought experiment from existing economic models of racial profiling. See, e.g., John Knowles et al., *Racial Bias in Motor Vehicle Searches: Theory and Evidence*, 109 J. POL. ECON. 203, 212, 227–28 (2001) (assuming elasticity of crime to policing and finding that disparities in the probability of being searched are due to statistical discrimination and not racial prejudice); Vani K. Boorah, *Racial Bias in Police Stops and Searches: An Economic Analysis*, 17 EUR. J. POL. ECON. 17, 35–36 (2001) (same). By assuming low elasticity and different offending rates, this thought experiment highlights the consequences of policing in proportion to offending rather than demographic distributions.

193. The 2000 Census reports that New York City had a population of 8,008,278, of which 2,129,762 persons (or 26.6 percent) were listed in the category “Black or African American alone.” See U.S. DEP’T OF COMMERCE, U. S. CENSUS BUREAU, *THE BLACK POPULATION: 2000: CENSUS 2000 BRIEF* (August 2001) at 7. The analysis in this essay applies equally to any other minority group, such as Hispanics, Asian Americans, lower income, upper income, or prior convicts. I use African Americans as

that all crime is committed by males between the ages of 15 and 40, and that this group consists of approximately two million persons, of which 75% are majorities and 25% are minorities. Assume that the incarcerated population from this large city (persons incarcerated in prison or jail) consists of approximately 55,000 persons (a rate of 688 per 100,000, which is consistent with the national average), and that they are all males between 15 and 40.<sup>194</sup> Assume that 45% of those incarcerated persons are minorities, and the other 55% are majorities.<sup>195</sup> Assume that the incarceration rates reflect offending rates much more than intentional discrimination—in other words, that minorities represent about 45% of offenders, majorities about 55%. What these assumptions mean is that minorities are offending at a higher rate as a percent of their population than are majorities: the proportion of minority males 15 to 40 convicted of a crime and sentenced to a term of incarceration is higher than the proportion for majority males 15 to 40. The “criminal element” in the minority group is bigger than the “criminal element” in the majority group. At time zero, here is the situation:

TABLE 5:  
TIME ZERO

Category	Total	Majority	Minority
City Population	8,000,000	6,000,000 (75%)	2,000,000 (25%)
Male 15 to 40 Population	2,000,000	1,500,000 (75%)	500,000 (25%)
Incarcerated Population	55,000 (100%)	30,250 (55%)	24,750 (45%)
Percent Incarcerated by Group	2.75%	2.02%	4.95%

Now, let us assume that we decide to engage in street stops on the basis of a criminal profile based on race differentials. We decide to stop-and-frisk 150,000 young men 15 to 40,<sup>196</sup> and we allocate 45% of our resources to minority suspects. Assuming that we find evidence of criminal activity in proportion to the “criminal element” in each group—in other words, assuming that the popula-

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the minority group in this illustration because criminal justice statistics are more easily broken down by race.

194. At year end 2001, the incarceration rate in the United States (number of persons held in state or federal prisons or in local jails per 100,000 U.S. residents) was 686. See PRISONERS IN 2001, *supra* note 3, at 2, Table 1.

195. At year end 2001, African-American, non-Hispanic persons represented about 46% of all incarcerated inmates under state and federal jurisdiction with sentences of more than one year. See *id.* at 11-12.

196. In New York City, with a police force of about 40,000 officers, the police department reportedly conducted approximately 127,000 (72.5% of 175,000 UF-250 Forms) stops involving a search, forcible stop or arrest during the period January 1998 to March 1999. See ELIOT SPITZER, THE NEW YORK CITY POLICE DEPARTMENT’S ‘STOP & FRISK’ PRACTICES: A REPORT TO THE PEOPLE OF THE STATE OF NEW YORK FROM THE OFFICE OF THE ATTORNEY GENERAL 88-91 (1999), available at [http://www.oag.state.ny.us/press/reports/stop\\_frisk/stop\\_frisk.html](http://www.oag.state.ny.us/press/reports/stop_frisk/stop_frisk.html).

tions of young men are offending at rates consistent with their relative incarcerated populations—we will arrest and send to jail (and perhaps later to prison) the following number of young men:

TABLE 6:  
YEAR ONE

Category	Total	Majority	Minority
Stopped Population	150,000	82,500 (55%)	67,500 (45%)
New Admission Population	5,005	2.02% of 82,500 or 1664	4.95% of 67,500 or 3,341
New Admission Percentage	100%	33.24%	66.76%

At the end of the first year, we would have apprehended 5,005 young men through this policy of racial profiling of stop-and-frisks. We would be picking up primarily offenses such as possession of drugs, guns, or other contraband, drug dealing, probation violations, outstanding warrants, etc. Naturally, we can imagine that a number of other individuals would be arrested during the period as a result of special investigations into homicides, rape, and other victim reported crimes. But focusing only on the stop-and-frisks, we would have 5,005 new admissions to jail (and possibly prison).<sup>197</sup>

Naturally, we are assuming here that the “hit rates” reflect perfectly the relative proportion of offenders in each racial group; that 2.02% of majority young men and 4.95% of minority young men are offending in the targeted population. David Harris argues in *Profiles in Injustice* that the facts are otherwise. Harris emphasizes that the growing data on racial profiling demonstrate that “[t]he rate at which officers uncover contraband in stops and searches is *not* higher for blacks than for whites, as most people believe.” “Contrary to what the ‘rational’ law enforcement justification for racial profiling would predict, *the hit rate for drugs and weapons in police searches of African Americans is the same as or lower than the rate for whites.*”<sup>198</sup> And certainly, the experience in New York confirms the lower hit rates. According to New York State Attorney General Eliot Spitzer, the rate at which stop-and-frisks turned into arrests—in other words, the rate of stop-and-frisks that turned up evidence of criminal behavior—differs by race. During the period studied (January 1, 1998 through March 31, 1999), for every one stop that would lead to an arrest, the New York City Police Department stopped 9.5 African Americans, 8.8 Hispanics, and 7.9

197. This represents 9.1% of the existing prison and jail population, which would then only represent a fraction of the new admissions to jails and prisons. In 1997, for instance, new court commitments to state and federal prisons consisted of 365,085 persons out of a total state and federal prison population of 1,194,581 (or 30.56%); new admissions to state prisons in 1997 stood at 538,375 or 51.3% of the state prison population at the beginning of the year. See CORRECTIONAL POPULATIONS 1997, *supra* note 44, at pages 9–10, Tables 1.17 and 1.20.

198. HARRIS, *supra* note 39, at 13 (emphasis in original).

European Americans.<sup>199</sup> The rate of stops-to-arrest for stops conducted by the Street Crime Unit is even more disproportionate: 16.3 for African Americans, 14.5 for Hispanics, and 9.6 for European Americans.<sup>200</sup> However, for purposes of this thought experiment, let us assume that the hit rate actually reflects the assumed higher rates of offending among minorities. Let's assume that the marginal reductions in hit rates in real life are an artifact of extremely disproportionate racial profiling (above and beyond any possible difference in offending rates).<sup>201</sup> Let's continue to take the racial profiling justification at face value.

In fact, we can take the justification for racial profiling one step further and assume a total and complete incapacitation effect associated with the profiling. Let us assume that for every additional person incarcerated, there will be one less person in that group committing crime. Let's assume pure one-for-one incapacitation. To compute the incapacitation effect, we need to determine what would have obtained without racial profiling. This is shown in the next table:

TABLE 7:  
RESULTS WITH RACIAL PROFILING

Category	Total	Majority	Minority
Non-profiled stops	150,000	112,500 (75%)	37,500 (25%)
Non-profiled arrests and admissions to jail/prison	4,125	2.02% of 112,500 or 2,269	4.95% of 37,500 or 1,856
Non-profiled admissions percentage	100%	55%	45%
Difference in admissions as a result of profiling	up 880	down 605	up 1,485

In other words, if we had not profiled—if we had not policed in proportion to offending rates, but rather color-blind (with a large enough sample, in proportion to group representation)—then there would have been 605 more majorities arrested and 1,485 less minorities arrested. If we assume that the only increase in the jail population is due to the racial profiling, then total jail admissions would have increased by 880 persons in that first year—a 1.6%

199. Spitzer, *supra* note 196, at 111.

200. *Id.* at 111–112, Table I.B.1.

201. For instance, if the highway patrols in 1992 stopped and searched 70% to 80% of African-American and Hispanic drivers on the Florida interstate highway, yet these groups represent only 5% of the drivers, there is bound to be disproportionately lower marginal hit rates for these groups. See Roberts, *supra* note 188, at 808–09. See generally Albert W. Alschuler, *Racial Profiling and the Constitution*, 2002 U. CHI. LEGAL F. 163, 215–16, n.216 (2002) (suggesting that the data on relative hit rates “say nothing at all about the empirical success or failure of racial profiling” and may be due simply to overprediction on the basis of race).

increase in the prison population.<sup>202</sup> We could then use these numbers to calculate how the incapacitation effect would reduce the rate of offending within the minority community and increase the rate of offending within the majority community.

TABLE 8:  
HOW THE INCAPACITATION EFFECT WOULD REDUCE OFFENSE RATES

	Total	Majority	Minority
"Criminal element": incarcerated population less incapacitation effect	54,120	30,855	23,265
Percentage "criminal element" by group	2.706%	2.057%	4.653%

If we assume a pure incapacitation effect, every additional minority person incarcerated as a result of profiling would be one less potential offender: for each additional minority offender incarcerated, we could reduce the "criminal element" at large. We could do the same for the majority community, but here, of course, the "criminal element" would increase. The result, naturally, would be that the different offending rates within the different groups would shift slightly during the course of the year: minority offending rates would decrease, while majority offending rates would increase.

Let us assume that we continue each year to stop 150,000 young men 15 to 40, that we stop them using *last year's* new incarceration breakdown as an accurate representation of who is committing crimes, and that our hit rates take account of the incapacitation effect. Notice here that we are aggressively pursuing a proportional law enforcement strategy, using last year's admissions rather than the total incarcerated population (which would include the base levels of 55,000 persons *plus* the net 880 new admissions). Here is what happens in the next few years:

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202. During the year 2001, the prison population in the United States grew 1.1%. See PRISONERS IN 2001, *supra* note 3, at 1. By assuming that the prison population increased by only 880 persons (or 1.6%) in this thought experiment, what we are saying is that apart from the increase associated with racial profiling, as many persons were admitted to prison as were released. This is, of course, what happens any time that the prison population remains stable over the course of a year. For an idea of admissions and releases, in the year 1997, 538,375 persons were admitted to state prisons and 489,914 were released from state prison, resulting in an increase in the state prison population of 48,461. See CORRECTIONAL POPULATIONS, *supra* note 44, at 9.

**TABLE 9:  
YEAR TWO**

Categories	Total	Majority	Minority
Stopped Population	150,000	49,863 (33.24%)	100,137 (66.76%)
New Admission Population	5,685	2.057% of 49,863 or 1,026	4.653% of 100,137 or 4,659
New Admission Percentage	100%	18.04%	81.96%
Non-profiled stops	150,000	112,500 (75%)	37,500 (25%)
Non-profiled arrests and admissions to jail/prison	4,125	2.02% of 112,500 or 2,269	4.95% of 37,500 or 1,856
Non-profiled admissions percentage	100%	55%	45%
Difference in admissions as a result of profiling	up 1,560	down 1,243	up 2,803
“Criminal element”: incarcerated population less incapacitation effect	52,560	32,098	20,462
Percentage “criminal element” by group	2.63%	2.14%	4.09%

Notice that the new incarcerations are becoming more racially skewed: almost 82% of the new admissions are minorities, whereas only about 18% are majorities. Notice also that the rate of offending within the minority group is declining slightly as a result of the incapacitation effect associated with racial profiling. We are continuing to assume here that the only increase in the prison population, here an increase of 1,560 (or 2.8% of the beginning year 55,880 prison population), is due to the racial profiling differential. Putting aside that differential, the same number of inmates are being released as persons are being newly admitted.

Now let's continue this thought experiment for three more years:

**TABLE 10:  
YEAR THREE**

Categories	Total	Majority	Minority
Stopped Population	150,000	27,062 (18.04%)	122,938 (81.96%)
New Admission Population	5,610	2.14% of 27,062 or 579	4.09% of 122,938 or 5,031
New Admission Percentage	100%	10.32%	89.68%
Non-profiled stops	150,000	112,500 (75%)	37,500 (25%)
Non-profiled arrests and admissions to jail/prison	4,125	2.02% of 112,500 or 2,269	4.95% of 37,500 or 1,856
Non-profiled admissions percentage	100%	55%	45%
Difference in admissions as a result of profiling	up 1,485	down 1,690	up 3,175
“Criminal element”: incarcerated population less incapacitation effect	51,075	33,788	17,287
Percentage “criminal element” by group	2.55%	2.25%	3.46%

TABLE 11:  
YEAR FOUR

Categories	Total	Majority	Minority
Stopped Population	150,000	15,483 (10.32%)	134,517 (89.68%)
New Admission Population	5,000	2.25% of 15,483 or 349	3.46% of 134,516 or 4,651
New Admission Percentage	100%	6.98%	93.02%
Non-profiled stops	150,000	112,500 (75%)	37,500 (25%)
Non-profiled arrests and admissions to jail/prison	4,125	2.02% of 112,500 or 2,269	4.95% of 37,500 or 1,856
Non-profiled admissions percentage	100%	55%	45%
Difference in admissions as a result of profiling	up 875	down 1,920	up 2,795
“Criminal element”: incarcerated population less incapacitation effect	50,200	35,708	14,493
Percentage “criminal element” by group	2.51%	2.38%	2.90%



TABLE 12:  
YEAR FIVE

Categories	Total	Majority	Minority
Stopped Population	150,000	10,464 (6.98%)	139,536 (93.02%)
New Admission Population	4,294	2.38% of 10,464 or 249	2.9% of 139,536 or 4,045
New Admission Percentage	100%	5.8%	94.2%
Non-profiled stops	150,000	112,500 (75%)	37,500 (25%)
Non-profiled arrests and admissions to jail/prison	4,125	2.02% of 112,500 or 2,269	4.95% of 37,500 or 1,856
Non-profiled admissions percentage	100%	55%	45%
Difference in admissions as a result of profiling	up 169	down 2,020	up 2,189
“Criminal element”: incarcerated population less incapacitation effect	50,031	37,728	12,304
Percentage “criminal element” by Group	2.51%	2.52%	2.46%

This experiment reveals two trends. First, the efficiency of our stops is increasing: each year, we are incarcerating more individuals based on the same number of stops. Second, the racial composition of the new incarceration admissions is becoming increasingly disproportionate. In other words, racial profiling, assuming its premises and fixed law enforcement resources, may be a self-confirming prophecy. It likely aggravates over time the assumed correlation between race and crime. This could be called a “compound” or “multiplier” or “ratchet” effect of criminal profiling: profiling may have an accelerator effect on disparities in the criminal justice system.

The important point of this thought experiment is that criminal profiling accentuates the purported correlation even assuming that the underlying assumptions are correct and that the practice is justifiable to some people. If the assumptions are wrong, criminal profiling will also be self-confirming. The same result—increased disproportionality in the racial balance of the incarcerated population—would obtain if all racial groups had the same offending rate, but we allocated *increasingly more* of our law enforcement resources to minorities than their representation in the general population. Excellent scholarship

underscores this point: if you spend more time looking for crime in a subgroup, you will find more crime there.<sup>203</sup> My point here, though, is that the same type of effect will likely occur *even on the assumption of differential offending—even if we accept fully the assumptions offered to justify racial profiling*. This is going to be especially true for the more unreported types of crime such as drug possession, gun carrying, or tax evasion.<sup>204</sup>

A few caveats are in order. First, there may be a feedback effect working in the opposite direction, assuming that actors know something about profiling and respond rationally.<sup>205</sup> In other words, different things may happen in response to the reallocation of crime fighting dollars. Persons in the targeted group may begin to offend less because they are being targeted. Persons in the lower crime group may begin to offend more because of their immunity. If so, there may be a counter-effect, and one would expect that the two distributions would begin to get closer to each other. As a result, there would be three competing forces at play: first, the ratchet effect, second, the incapacitation effect, and third, the feedback effect. The reason that I focus on the ratchet effect is that it is *logically entailed* by criminal profiling. It is, in this sense, necessary and internal to profiling. In contrast, the feedback effect is an indirect effect. It is mediated by mentalities. It assumes dissemination of policing information and rationality on the part of criminal offenders—questionable assumptions that are, at the very least, likely to produce a more removed effect.

A second caveat is that I have focused exclusively on one variable—race and ethnicity. Police work rarely does this, and practically never does explicitly anymore (outside international anti-terrorism policing). But the analysis would

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203. See, e.g., Roberts, *supra* note 188, at 808–810. This is also the sense in which David Harris argues that racial profiling is a “self-fulfilling prophecy.” HARRIS, *supra* note 39, at 223–25. His argument is not that racial profiling is too effective. On the contrary, he argues that the evidence demonstrates it is ineffective and results in lower hit rates for minorities. “Racial profiling is neither an efficient nor an effective tool for fighting crime,” he writes at 79. His argument that racial profiling is nevertheless a self-fulfilling prophecy is, instead, that police will find crime wherever they look. If they spend more time in minority communities, they will find more crime there: “whom they catch depends on where they look.” *Id.* at 224.

204. Tax evasion is actually a very interesting case. The IRS uses a “Discriminant Index Function” (“DIF”) to detect false deductions. “The DIF function is based on a secret formula, which in turn represents a regression on past audits to determine which factors are most likely to indicate cheating. This formula assigns a score to each return reflecting the estimated likelihood of noncompliance for that taxpayer, based on the amounts stated on the return for each type of income and deduction.” Certain returns are then reviewed manually in order to choose returns to be examined. Depending upon the problems detected on an examined return, the return will then be sent to an I.R.S. Service Center or the I.R.S. district office. PRENTICE HALL 1991 FEDERAL TAX COURSE 1344–45 (1991). Returns that fit the profile of those that have a significant dollar amount of evasion are the most likely to be examined. JOEL SLEMROD & JON BAKIJA, *TAXING OURSELVES*, 157 (2000).

205. This is going to be particularly true with more organized forms of criminality, such as more professional illegal drug operations. So, for example, if the head of a drug organization receives information that police are profiling certain drivers on the interstate, it is likely that the organization will switch couriers (so long, naturally, as there are available couriers with different profiles). This suggests that the feedback effect may depend on the organizational abilities of the criminal enterprise. A central premise of this thought experiment, though, is that the feedback effect is likely to be substantially smaller than the ratchet effect because of scarce law enforcement resources and the plentiful nature of crime—in other words, that the elasticity of crime to policing is extremely low.

not differ if there were other variables. There would be the same compounding effect for each variable, with different directions of increased disproportionality. There is no *a priori* reason to believe that the different directions of bias would cancel themselves out in any way—or would cancel out the effect on race.

A final caveat is that this is a simplified model that focuses aggressively on race and ethnicity and aggressively follows last year's new incarceration rates. Someone might respond that we would assume a fixed offending differential (say 45% versus 55%) and continue to enforce criminal law in that proportion *regardless* of the racial composition of new incarcerations. But how would we choose the original enforcement rate? Would we use the 23.1% from 1926, the 45.8% from 1982, or the 51.8% from 1991? Which one of these reflects a more "natural" offending differential? In what sense would any of them be more reliable than the other? More reliable than last year's differential? How far back in history would we need to go to find the right differential?

The key point is that, under certain conditions, the ratchet effect is likely to outweigh the feedback and incapacitation effects. This is likely to be the case when there is a healthy supply of criminal activity, limits on law enforcement resources, and relatively unreliable natural offending rates. Under these conditions, targeting purportedly high-offending groups or neighborhoods is not going to deplete the supply of criminal activity or significantly alter offending rates, but instead ratchet the imbalance in the incarcerated population. These conditions likely characterize much of the crime and punishment field, especially illegal drug possession, gun carrying, and other lower-level street crimes, as well as fraud and other larcenies. Ultimately, the likely effect of criminal profiling under these conditions is a compounding of the correlation between the particular trait that is being profiled and the associated crime.

Using racial profiling as an illustration for criminal profiling is a double-edged sword. The advantage is that it facilitates engagement; we have all become extremely agile at thinking about and debating racial profiling, especially since September 11, 2001. At the same time, however, we tend to draw a sharp distinction between racial profiling and other forms of criminal profiling. Race is unique in American practice and discourse, and it raises exceptional historical, political, and cultural dimensions. I am using racial profiling as an example, but what I have said about it should apply with equal force to other types of profiling—whether it is profiling of disorderly people (squeegee men and panhandlers), disaffected youth (trench coat mafia), domestic terrorists (young to middle aged angry men), accounting defrauders (CEOs and CFOs), or tax evaders (the wealthy).

What I am suggesting is that criminal profiling generally, in a world of finite law enforcement resources, is likely to reshape offender distributions along the specific trait that is being profiled, and this is likely to be the case whether the criminal profiling is viewed by some as a legitimate reflection of differential offending rates or instead the product of malicious selective enforcement—

whether the underlying assumptions offered to justify criminal profiling are true or false. *Wrongly or rightly*, criminal profiling is likely to have a ratchet effect that gradually reinforces the assumed crime correlations.

Has the gradual development of the actuarial approach in criminal justice contributed to the growing racial imbalance in the carceral population? Clearly, a combination of practices closely associated with criminal profiling has contributed to these national trends. These practices include drug interdiction programs at ports of entry and on interstate highways, order-maintenance crackdowns involving aggressive misdemeanor arrest policies, gun-oriented policing in urban areas focusing on stop-and-frisk searches and increased police-civilian contacts, as well as other instances of profiling ranging from these drug-courier, street dealer, gang member, and disorderly profiles all the way to profiles of disgruntled former federal employees or outcast and bullied high school youths. The investigatory search and seizure jurisprudence that has grown out of *Terry v. Ohio*,<sup>206</sup> especially cases such as *Whren v. United States*<sup>207</sup>—in which the Supreme Court upheld the use of a pretextual civil traffic violation as a basis for a stop-and-frisk procedure that was triggered by suspicion that the driver and passenger were engaged in drug trafficking—has likely facilitated the emergence of these practices.<sup>208</sup>

More research would be necessary to answer the question whether or to what extent the refinement of the actuarial approach *itself* has contributed. It would be crucial to parse the data to explore which portion of the national trends rely on offender differentials, or on targeted law enforcement disproportionate to group representation, and to a possible multiplier effect, as well as to measure any possible feedback and incapacitation effects. Ultimately, it may be necessary to explore and weigh the value of efficiency in criminal law. The point of the previous thought experiment is that actuarial methods—including criminal and especially racial profiling—may have contributed to the national trends rightly or wrongly. Many have argued wrongly, and if so, the matter is clear: the wrongful profiling of individuals has no offsetting benefit. It is inefficient, discriminatory, and injurious. But even if the underlying assumptions of profiling are *right*, there may nevertheless be adverse compounding effects. The targeting of groups for purposes of policing efficiency does more than just improve efficiency; it may shape our social reality.

In his book *Malign Neglect*, Michael Tonry explains the logic of criminal profiling. It is, most often, he suggests, a question of efficiency:

There is another more powerful reason that the police focus their attention on the inner city. Both for individual officers and for departments, numbers of arrests made have long been a measure of productivity and effectiveness. If it takes more work and

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206. 392 U.S. 1 (1968).

207. 522 U.S. 1119 (1998).

208. See also, e.g., *United States v. Villamonte-Marquez*, 462 U.S. 579 (1983) (otherwise valid warrantless boarding of vessel by customs officials not rendered illegal by ulterior motive of accompanying state police officer); *United States v. Robinson*, 414 U.S. 218 (1973) (traffic violation stop not rendered illegal because pretext for drug search); *Gustafson v. Florida*, 414 U.S. 260 (1973) (same).

longer to make a single drug arrest in Highland Park than in Woodlawn, the trade-off may be between two arrests per month of an officer's time in Highland Park and six arrests per month in Woodlawn. From the perspectives of the individual officer's personnel record and the department's year-to-year statistical comparisons, arrests are fungible, and six arrests count for more than two.<sup>209</sup>

Efficiency, however, may not be the only product of criminal profiling. Regardless of whether those six arrests are legitimate and proportional to offending in those areas, the effect over time may be to aggravate the disparities between Woodlawn and Highland Park, especially with regard to crimes like drug or gun possession. The actuarial approach may reshape reality. In the end, the decision to engage in criminal profiling is not just a matter of increased law enforcement efficiency. It involves a political and moral decision about the type of world that we are creating. There is a normative choice that needs to be made. The problem, if there is one, is certainly not the proliferation of printed numbers, nor the identification of statistical regularity. It is instead what we *do* with the information.

## V

### CONCLUSION

One final question: Did the refinement of the actuarial model in criminal law contribute to the larger theoretical shift during the twentieth century from the individualization of punishment to incapacitation theory? Is there something about the desire to model and verify that facilitates or promotes an incapacitation approach? In the parole case study, we observed a delicate shift from using the new science of crime to find the right rehabilitative treatment to using probabilities to predict success and failure on parole. This is reflected in the evolution from a rehabilitative aspiration, which was terribly hard to operationalize, to a functioning parole prediction system that was far more easily operationalized. Is it possible that the desire to operationalize and verify somehow promoted this delicate shift? Was the refinement of the actuarial methods the product of the larger substantive theoretical change from individualization to incapacitation—or did it instead contribute to that change, did it promote that shift?

This is a challenging question and in exploring the question it will be important to focus not only on the numbers, but also on the political and social sensibilities that mark the turn of century. Ian Hacking's research suggests that the proliferation of printed numbers alone was not enough to trigger the taming of chance. The probabilistic turn developed more in Western Europe (France and England), and far less in Eastern Europe (Prussia) because of different political sensibilities—the West being, crudely, more individualistic, atomistic, and libertarian; the East being more community-oriented and collectivist. These sensibilities helped laws of chance flourish in the West, but inhibited their development in the East. “The Prussia that overthrew Napoleon created a

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209. TONRY, MALIGN NEGLECT, *supra* note 8, at 106–07.

conception of society that resolutely resisted statistical generalization,” Hacking writes. “The Prussians created a powerful bureau but failed to achieve the idea of statistical law.”<sup>210</sup> The reason is that, in a world of collectivist sensibilities, the laws of regularity are more likely to be associated with culture than with individual behavior. In contrast, in a more atomistic world guided by Newtonian physics, social mathematics was more likely to flourish. Thus, Hacking concludes: “Without the avalanche of numbers set in motion by the Duvillards, there would have been no idea of statistical laws of society. But without the *a priori* belief that there are Newtonian laws about people, probabilistic laws would never have been read into those numbers.”<sup>211</sup>

Our research agenda, then, will need to focus not only on mathematical computations, but also on moral, political, and intellectual sensibilities at the turn of the twenty-first century. How is it, after all, that purported correlations between prior incarceration and future criminality have led us to profile prior criminal history for purposes of sentencing and law enforcement, rather than to conclude that there is a problem with prisons, punishment, or the lack of reentry programs? What conclusions should we draw from the observation that certain groups may be offending at higher rates than others with regard to specific crimes? The numbers, the correlations, the actuarial methods themselves do not answer the questions. It is, again, what we *do* with the numbers that is far more telling.

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210. HACKING, *supra* note 47, at 35.

211. *Id.* at 46.