Slouching Toward Crime


John Monahan†

Crime and Human Nature, by James Q. Wilson and Richard J. Herrnstein, is the most important book on crime to appear in a decade. More precisely, it is the most important book on crime published since Delinquency in a Birth Cohort ¹ in 1972. And it is likely to be just as influential.² While the last general study of crime causation—Silberman's Criminal Violence, Criminal Justice³—consolidated rather than challenged conventional thinking, Crime and Human Nature revels in jarring much that usually goes undisturbed in contemporary criminology.

In this review, I examine the general theory of crime causation put forth by Wilson and Herrnstein; in particular I focus on the most controversial aspect of that theory—the existence of “constitutional differences” in the propensity to commit crime. I summarize only briefly the findings that Wilson and Herrnstein present and the conclusions they draw. Finally, I reflect on the implications of Crime and Human Nature for law and policy, and for the future study of the origins of crime.

I. Behavioral Theory of Crime

The theory of crime causation that Wilson and Herrnstein offer aspires to address “the full range of factors that cause individual differences in criminality.”⁴ The authors summarize the theory in non-mathematical terms as follows:

---

* Henry Lee Shattuck Professor of Government, Harvard University; Collins Professor of Management, University of California at Los Angeles.
** Edgar Pierce Professor of Psychology, Harvard University.
† Professor of Law, University of Virginia. I would like to thank Professors Irving Gottesman and Park Dietz for their comments on this Review, which was written while I was a Fellow of the John Simon Guggenheim Memorial Foundation.

Slouching Toward Crime

The larger the ratio of the rewards (material and nonmaterial) of noncrime to the rewards (material and nonmaterial) of crime, the weaker the tendency to commit crimes. The bite of conscience, the approval of peers, and any sense of inequity will increase or decrease the total value of crime; the opinions of family, friends, and employers are important benefits of noncrime, as is the desire to avoid the penalties that can be imposed by the criminal justice system. The strength of any reward declines with time, but people differ in the rate at which they discount the future. The strength of a given reward is also affected by the total supply of reinforcers.6

While Wilson and Herrnstein’s theory is “built upon modern behavioral psychology,”6 it goes far beyond knee-jerk (or, rather, pigeon-pecking) Skinnerianism. The perception of “equity”—that is, the “interaction between what one person thinks he deserves and what he sees other people getting”?—is the most obviously social psychological variable in their account. The authors are aware of the risk they run by attempting to state so general a theory—“that a theory general enough to explain everything about crime will not provide many testable hypotheses explaining any one thing very precisely.”8 But it is precisely Wilson and Herrnstein’s ambitions to offer grand explanations that will give this work an extended shelf-life. And the theory does seem to yield testable hypotheses about many aspects of criminal behavior, hypotheses that the existing research evidence does not refute and often supports. The theory seems to me to be a reasonable one. Given the present state of criminology, this is no small thing.

Despite the plausibility of their general formulation and the prodigious amount of applied research they marshal to support each of its components, Wilson and Herrnstein reach too widely in their efforts to invoke the support of basic experimental psychology. “In laboratory settings,” they state, “involving both human and animal subjects, each element of the theory has received at least some confirmation and the major elements have been confirmed extensively.”9 Though the ability of laboratory studies with human subjects to yield findings applicable beyond the walls of psychology buildings is perhaps the most controversial issue in psychology,10 I am willing to accept that laboratory research may be of considerable heuristic value. Further, for some of the factors they consider, such as

---

5. P. 61.
6. P. 43.
7. P. 56.
8. P. 66.
the effect of time on the value of a reward or a punishment, even animal analogies may be tenable. But that research on animal subjects “confirm[s] extensively” even the “major elements” of the theory is more than Wilson and Herrnstein need to argue, and more than the reader needs to concede. The rat in a Skinner box does not evaluate the “equity” of the pellets it has received by jealously peering over its shoulder and counting the pellets of fellow rodents who exerted the same amount of bar-pressing effort.

Of the 82 studies I count in the two edited volumes to which the reader is referred in support of the assertion that “both human and animal” research has “confirmed extensively” the major elements of the theory,11 73 relied upon data from either rats or pigeons (with a small scattering of more exotic “subjects” such as turtledoves and bluejays). Only 9 studied human beings, with none of these 9 having anything to do with crime. Given the tenuous connection between animal research and human social behavior, the theoretical infrastructure of Crime and Human Nature appears more plausible than proven.

A. Constitutional Factors

Wilson and Herrnstein begin their substantive review of research on crime causation by considering what they call “constitutional factors,” which they define as “factors, usually present at or soon after birth, whose behavioral consequences appear gradually during the child’s development.”12 The notoriety of this chapter—which was excerpted for publication in the New York Times Magazine13—no doubt derives from the fact that here, most explicitly, the authors thumb their noses at the current reign of sociological criminologists, for whom biology has long been the ultimate taboo. The attention drawn to this topic is misleading to the person who wishes an assessment of the book as a whole, because in several ways it is the most uneven part of the book.

Wilson and Herrnstein consider three types of constitutional factors in crime: “anatomical correlates,” principally Sheldon’s “somatotypes” or “body build” studies; research on the heritability of criminal tendencies; and “cytogenetic” studies of the relationship between chromosomes and crime.

In 1940, William Sheldon, a physician, published a book suggesting that physique or body build correlated with behavioral tendencies, includ-
Slouching Toward Crime

ing the tendency to commit crime. A person’s “somatotype,” Sheldon argued, had three components, endomorphy, mesomorphy, and ectomorphy. Endomorphs tend to be round; mesomorphs tend toward short, heavy-boned musclearity; and ectomorphs are likely to be tall and linear. Every person’s physique is said to have all three components, and most people fall in the midrange of each component when they are rated on the scales Sheldon developed. Criminals, however, were found in a number of studies to be “mostly mesomorphs deficient in ectomorphy.” They are described as having “such masculine traits as a broad chest flaring toward the shoulders, low waist, relatively large arms, prominent muscle relief, large bones and joints, [and] fat distributed throughout the body.”

Wilson and Herrnstein are quick to emphasize that “[p]hysique does not cause crime, nor is it an inevitable correlate of it.” They note that Sheldon himself found that “the mesomorphic, nonectomorphic physique often predominates, not just among criminals, but among other occupational groups, such as salesmen and politicians.” Yet the evidence about body build, as Wilson and Herrnstein read it, “leaves no doubt that constitutional traits correlate with criminal behavior.”

Others are not so sure. Pollock, Mednick and Gabrielli—themselves strong proponents of biological criminology—conclude in their recently published chapter in the Encyclopedia of Crime and Justice that Sheldon’s work is “primarily of historical interest.” They argue:

Some research findings suggest that delinquents tend to be mesomorphs, but the relationship is weak. In general, empirical research has revealed little evidence for the unique temperamental traits that Sheldon ascribed to the three somatotypes . . . . [I]t is unlikely that this theory will significantly influence future research on biological factors in criminality.

Sheldon’s theory never regained credibility after a scathing review of its methodology published by the sociologist Edwin Sutherland in 1951. The most recent work on somatotypes cited by Wilson and Herrnstein—a thirty-year follow-up of Sheldon’s sample of delinquents, written by one

15. P. 85.
17. P. 89.
18. Id.
19. P. 90.
21. Id.
of Sheldon’s original collaborators—seems not to have profited from Sutherland’s admonitions. The study consists of the updated biographies of the 200 men first analyzed by Sheldon in 1949. Consider Case Number 198, chosen at random from the group for whom “criminality” was the primary diagnosis:

Case number 198 was a 56-year old endomorphic mesomorph with sturdy legs, trunk, and neck. . . . The eyes have a hard steady stare. . . . He was a tough character and had a mesotonic love of risk. . . . There is no softening or leavening in him and he operates with a hard andric quality that extends beyond what his overt structure would seem to support. . . . Is there such a thing as a “born criminal” and is this man an example? We asked these questions in our first report and still consider them unanswered.

Nor are these questions likely to be answered by this kind of impressionistic account. To be sure, some correlation between “body build” and certain types of crime can be expected on purely instrumental grounds. Physique is plainly a factor in some people’s choice of and success in certain other “careers.” Sports are the most obvious examples. While the coaching “environment” has a large effect, professional basketball players and jockeys are “born” more than “made.” To the extent that large-boned, muscular males (“nonectomorphic mesomorphs”) enjoy a competitive advantage when engaging in some forms of street crime—gangfighting, for example—it should not be surprising that more of them engage in it. Nor should it be news that the Woody Allens of the world are underrepresented among the ranks of strong-arm robbers. But given that there are many types of crime for which there is no advantage in being built like a mammoth hunter—such as car theft and larceny—and, more importantly, given the ready availability of those great levelers of physical differences—hand guns—the relationship between body build and crime, in the aggregate, should be weak. And it is.

The genetic transmission of a propensity to commit crime—the second of Wilson and Herrnstein’s constitutional factors—has much greater evidentiary support. Many studies have provided estimates of how much of the relationship between relatives, when both are criminal offenders, can be attributed to shared genes and how much to shared environments. Twin studies provide one good test of a genetic contribution to crime. Identical (or monozygotic) twins develop from a single fertilized egg and

24. Id. at 477, 479.
hence share all the same genes. Fraternal (or dizygotic) twins develop from two eggs that were separately fertilized. They share only half of their genes on average, the same amount as ordinary brothers or sisters. If identical twins are more alike than fraternal twins with respect to their propensity to commit crime, then plausible inferences can be made about the role of genetic factors. The best study of this phenomenon, based on over three thousand pairs of twins in Denmark and looking at serious criminal offenses, found that the probability of finding a criminal twin when the other twin was criminal was 51 percent if the male twins were identical, but only 30 percent if the male twins were fraternal.

Another way of assessing whether a genetic contribution to crime exists is to look at children put up for adoption at birth or shortly thereafter. If the child's later criminality bears a stronger resemblance to his or her biological parents than to his or her adoptive parents, a genetic influence can be inferred. Here, too, the data bear out such an influence. A recent study of over 14,000 adoptees found that if a boy's adoptive parents are criminal, but his biological parents are not, he has only a slightly increased risk of becoming a criminal himself, compared with boys who had neither adoptive nor biological criminal parents. However, if a boy's bi-

---

26. The twin method assumes that monozygotic twins share similar environments to the same extent that dizygotic twins do. This "equal environments" assumption has been challenged by those who claim that monozygotic twins experience more similarity in their environments than do dizygotic twins. See, e.g., Hoffman, *The Changing Genetics/Socialization Balance*, 41 J. Soc. Issues 127, 131 (1985) ("[i]t is because monozygotic twins look alike that they are treated alike, and because they are treated alike, they develop similar personalities."); The assumption of equal environments, however, has received support from a number of studies. See, e.g., Rowe, *Biometrical Genetic Models of Self-Reported Delinquent Behavior: A Twin Study*, 13 Behavior Genetics 473, 473 (1983) ("Several tests supported the equal environments assumption, indicating that the inference of genetic influence was legitimate."); Plomin, Willerman & Loehlin, *Resemblance in Appearance and the Equal Environments Assumption in Twin Studies of Personality Traits*, 6 Behavior Genetics 43, 43 (1976) ("greater resemblance in appearance in identical twins does not make them more similar in personality"); J. Loehlin & R. Nichols, *Heredity, Environment, & Personality: A Study of 850 Sets of Twins* (1976) (degree to which twins shared such environmental factors as same teachers and same bedroom, and frequency with which they played together, did not relate to twins' degree of personality similarity).


28. But see Hoffman, supra note 26, at 145 (case that genetics is responsible for differences in child development is weak).

29. One study found that if neither a boy's biological nor adoptive parents had a criminal conviction, the probability of the boy himself having at least one conviction was 13.5 percent. If his adoptive, but not biological, parents were criminal, the odds rise slightly, to 14.7 percent. If his biological, but not adoptive, parents were criminal, however, the odds increase by more than one-third, to 20.0 percent. Of the boys with both biological and adoptive criminal parents, 24.5 percent had a criminal conviction of their own. Mednick, Gabrielli & Hutchings, *Genetic Influences in Criminal Convictions: Evidence From an Adoption Cohort*, 224 Science 891, 892 (1984).
ological parents are criminal and his adoptive parents are not, the probability of the boy's later being convicted of a crime rises substantially. The highest rate of criminality is found among boys whose biological and adoptive parents are criminal.\textsuperscript{30}

The evidence concerning genetic contribution may be somewhat more complex than Wilson and Herrnstein portray it, however. In discussing the adoption study described above, they state that "[a]doptee crime was predicted by biological-parent crime no matter what the crime category, at least when the categorization was no finer than violent versus property. As far as this dichotomy is concerned, the genetic disposition is toward crime in general, not toward specific offenses."\textsuperscript{31}

Yet a recent re-analysis of Christiansen's Danish twin data leads to the contrary conclusion: "[T]here is no significant genetic overlap between the liabilities to crimes against persons and crimes against property only."\textsuperscript{32} If one male twin had a criminal record that included crimes against persons, his co-twin had a 20.5 percent chance of being arrested for violent crime if they were fraternal twins, but a 41.7 percent chance of being arrested for violent crime if they were identical twins. The chances of the co-twin having an arrest record that consisted solely of property crimes were much lower and did not differ between identical and fraternal twins.\textsuperscript{33}

Correspondingly, if a twin had an arrest record that consisted solely of property offenses, his co-twin had a 16.4% chance of being a property offender if they were fraternal twins, but a 40.0% chance if they were identical twins. The probability that the co-twin had been arrested for a violent crime was much lower and did not differ between the two types of twins.\textsuperscript{34}

In addition to indicating that violent and property offenses may have different genetic antecedents, recent data suggest an important distinction between the heritability of juvenile delinquency and adult crime, a distinction not made by Wilson and Herrnstein.

A detailed review of six twin studies of juvenile delinquency and nine twin studies of adult criminality by Gottesman and his co-workers revealed no difference in concordance rates\textsuperscript{35} for juvenile delinquency between monozygotic and dizygotic twins, despite the difference in the degree of genetic relatedness. Thus, Cloninger and Gottesman conclude that "[n]o important role can be assigned to genetic factors in regard to the

\textsuperscript{30} Mednick, Gabrielli & Hutchings, supra note 29.
\textsuperscript{31} P. 99.
\textsuperscript{32} Cloninger & Gottesman, supra note 27.
\textsuperscript{33} Id.
\textsuperscript{34} Id.
\textsuperscript{35} Concordance rates for juvenile delinquency refers to the probability that one twin will be a delinquent if the other is.
etiology of juvenile delinquency." As Gottesman notes, these data are consistent with West and Farrington’s observation that criminality in parents is more strongly associated with delinquency in offspring after puberty than before puberty. The heritability of adult crime, however, as inferred from the substantial differences in concordance rates between the two types of twins, is as striking in Gottesman’s review as it is in Wilson and Herrnstein’s.

The final constitutional factor discussed by Wilson and Herrnstein is the “cytogenetic” factor of a specific genetic correlate of crime—the presence of an extra Y chromosome among some males in addition to the XY configuration possessed by most males. The report in 1965 that XYY males were overrepresented in criminal populations has been described as “one of the most publicized criminological events of this century” and decried as “demonism revisited.” Contrary to the initial hysteria, later studies based on proper sampling techniques found that although XYY men do have higher rates of criminal offenses than XY men, they do not have higher rates of violent crime.

Wilson and Herrnstein acknowledge the relative lack of significance of the cytogenetic factor:

By far, most of the men in prisons are cytogenetically normal, with just the usual XY chromosomes, and most XYY men, perhaps as many as 98 percent of them, are not institutionalized at any given time. The XYY configuration contributes little to the totality of crime in an absolute sense.

Considering that the best research study on this topic had to survey 31,439 males to find twelve with XYY chromosomes, this seems something of an understatement.

Wilson and Herrnstein are appropriately restrained in rendering their final verdict on just how large a role all of these “constitutional factors” play in causing crime. Criminal behavior, they state,

36. Gottesman, Carey & Hanson, supra note 27, at 297.
38. P. 100-02.
43. P. 101.
44. Witkin, supra note 42.
like all human behavior, results from a complex interaction of genetic and environmental factors. Our knowledge of this interaction is not yet good enough to permit anyone to say with confidence how much of the variation in the law-violating behavior of people can be attributed to genetic and how much to environmental factors.45

Their claim is only that crime “cannot be explained wholly by reference to . . . social circumstances,”46 and that the constitutional contribution is “not trivial.”47

So stated, Wilson and Herrnstein’s position on the role of constitutional factors is a cautious one. The tone of the book, however, is unmistakably otherwise. Not only do constitutional factors get top billing in the sequence of exposition—and sole billing in the aspect of the theory selected for dissemination in the popular press48—but the space devoted to biological notions exceeds by more than half the average coverage given the other three substantive parts of their theory. To many who may finally be willing to give an inch to biological factors in the causation of crime, it may seem that Wilson and Herrnstein are taking a mile. In fairness, however, it should be noted that Wilson and Herrnstein’s skew toward the biological is no more pronounced than the strong environmentalist tilt of almost all other writing on crime.

B. Other Causes of Crime

In subsequent chapters, Wilson and Herrnstein review and try to make sense of research that bears on fifteen factors that have been implicated as causes of crime. The essence of the data, and of Wilson and Herrnstein’s interpretation of it, are as follows.

**Gender:**49 Males are five to fifty times as likely to be arrested as are females. This is true in every society in which sex differences in crime have been measured, and has been true at least since data began to be recorded in the early nineteenth century. Wilson and Herrnstein’s “best guess”50 is that this disparity reflects differences in biologically-based aggressive drives more than sex-role socialization.

**Age:**51 People in their late teens are ten to twenty times more likely to be arrested than people in their early fifties.52 This factor, too, is approxi-
slouching toward crime

approximately the same in all societies, and has been true for as long as we have had records. Adults can delay gratification longer than can juveniles, and "the reinforcers for noncrime grow" as a person gains investment in a job and a family of his own.53

Intelligence:54 Criminals, on average, have a measured IQ ten points lower than noncriminals, and this does not reflect a bias in the tests or the simple effects of criminals' lower socioeconomic status. At least, this is what "hundreds of studies" conclude.55 Low IQ may lead to failure in school, failure in the marketplace, and a sense of fatalism regarding long-term prospects, thereby lowering the rewards of noncrime.

Personality and Psychopathology:56 "Psychopathy," the authors write, "is by all odds the prime criminogenic personality trait."57 Psychopaths are said to have an unusually high need for stimulation, to be difficult to "condition" because they fear punishment less, to be impulsive, and to be relatively free of anxiety.

Families:58 Parents who teach their children to value parental approval, and who also teach their children that this approval will be forthcoming only if they obey family rules, are likely to raise children who do not later flout the rules of society. Inconsistent discipline, rather than too much or too little discipline, fosters crime.

Broken and Abusive Families:59 Evidence relating to the relationship between broken families and later crime is "inconsistent," and that relating to the effect of abusive parents on the criminality of their children is "incomplete."60 For now, "the safest conclusion is that the central features of family life—a fortunate biological endowment, secure attachments, and consistent discipline—are more important than whether it is a two-parent family, one with a working mother, or one in which corporal punishment is frequently employed."61

Schools:62 A "good school," from the perspective of crime prevention, is one that "regardless of its socioeconomic composition, is not swamped with low-aptitude students and provides a firm but nurturant social envi-

53. P. 147.
55. P. 168 (quoting HIRSCHI, CAUSES OF DELINQUENCY 111 (1969)).
57. P. 198.
58. Pp. 213-44.
60. P. 245.
61. P. 262.

... environment in its classrooms." Boys with below-normal verbal intelligence will have a better chance of avoiding crime if they attend such a school.

**Community:** Aspects of neighborhoods, such as their population density, may affect the crime rate, but it is difficult to know how much. Physically changing a community to make its space more "defensible"—by increasing street lighting, for example—has equivocal results. Perhaps community factors have only a weak effect on crime because "high-rate offenders begin offending very early in their lives, well before communal factors . . . could play much of a role."

**Labor Markets:** The connection between crime and an individual's unemployment is complex. Providing jobs to ex-prisoners, for example, has little effect on whether they continue in crime. It may well be that unemployment has some effects on some kinds of offenders. In general, however, both crime and chronic unemployment are probably expressions of some underlying common cause, such as might be true of people "who are intensely present-oriented and thus find looking for a job unattractive but stealing a purse irresistible."

**Television and the Mass Media:** The evidence that television violence has any independent effect on violent crime is still greatly disputed, and the effect that it does have is likely to be very small and limited to boys with a prior violence-prone disposition. It is possible that watching massive amounts of television, regardless of the content, "so poaches the brain or predisposes viewers to immediate gratification that they become unable to work for distant goals or to engage in disciplined activity."

**Alcohol and Heroin:** Alcohol affects crime directly, by intensifying the aggressivity and impulsiveness of some of those who use it. Heroin affects crime indirectly, by increasing the incentive to steal among those who use it on a frequent basis.

**The Social Context:** No one has yet been able to demonstrate that offenders can be rehabilitated by verbal techniques such as psychotherapy, although hundreds of researchers have tried. There is some evidence that altering the consequences of criminal behavior (by arresting rather than...
"counseling" spouse abusers, for example) may have a crime-reduction effect.\textsuperscript{74}

\textit{Historical Trends:}\textsuperscript{75} The crime rate in industrialized Western nations was high during the early years of the 19th century, decreased substantially in the latter half of the century, and began to rise again in the 1950's. More recently the crime rate in the United States seems to have reached a plateau, and perhaps even to have declined a bit. The reasons for the upward shifts probably lie in general social changes: the higher proportion of young males in the population; the enhanced value and quantity of "stealable" goods; the diminished risk of subjection to punishment; and the decreased cultural emphasis on self-control.

\textit{Cultural Differences:}\textsuperscript{76} Perhaps the most bracing statistic in \textit{Crime and Human Nature} is that the risk of being robbed in the United States is 208 times higher than the risk of being robbed in Japan, a country of roughly comparable urbanization and industrial development. Why? There are four possible reasons. Japan has a much more homogeneous population than the United States. The Japanese have somehow managed to maintain "village life" in their cities; neighbors know one another. In contrast to Americans' emphasis on individualism, the Japanese emphasize group solidarity and achievement. And, while Americans are concerned with their legal rights, the Japanese are more concerned with their social obligations.

\textit{Race and Crime:}\textsuperscript{77} Blacks are about four times more likely than whites to be arrested for murder, rape, and robbery. This difference persists no matter how one adjusts for other factors such as social class, urbanization, or age, and carries through all phases of the criminal justice system. Bias on the part of the police is unlikely to account for more than a small portion of this difference.\textsuperscript{78} Again, why? Economic deprivation is one theory.\textsuperscript{79} "Inadequate socialization" in black families, disproportionately headed by young, unmarried females, is another.\textsuperscript{80} Subcultural deviance,

\begin{footnotesize}
\begin{enumerate}
    \item P. 403.
    \item Pp. 407–38.
    \item Pp. 439–58.
    \item Pp. 459–86.
    \item Hindelang attempted to assess whether black overrepresentation in arrest statistics for common law personal crimes reflected differential involvement by blacks in crime or differential selection of blacks for arrest by the police. He compared FBI data on the race of persons arrested for violent crimes with information on the racial identification of offenders made by victims. This latter information was obtained from the National Victimization Panel, a large-scale survey done in conjunction with the United States Census Bureau. While finding some evidence of police bias, he concluded that the "data for rape, robbery, and assault are generally consistent with official data on arrestees and support the differential involvement hypothesis." Hindelang, \textit{Race and Involvement in Common Law Personal Crimes}, 43 \textit{Am. Soc. Rev.} 93, 93 (1978).
    \item Pp. 472–76.
    \item Pp. 476–81.
\end{enumerate}
\end{footnotesize}
in which the values of the larger (white) society are rejected provides a third.\textsuperscript{81} And the ubiquitous "constitutional factors" of intelligence and temperament are a fourth.\textsuperscript{82} "There is no way," Wilson and Herrnstein write, "to discuss the evidence . . . on constitutional factors underlying the association between race and crime without giving offense."\textsuperscript{83} With this, at least, few will disagree.

II. IMPLICATIONS FOR LAW, POLICY, AND THE STUDY OF CRIME

Because it is Wilson and Herrnstein's view that "much, if not all, criminal behavior can be traced to antecedent conditions,"\textsuperscript{84} can criminal punishment ever be morally justified? The authors invoke H.L.A. Hart\textsuperscript{85} in reaching a strongly affirmative answer. "Free will," according to Hart, is a negative rather than a positive attribute of behavior. If an act was committed without the presence of specified excusing conditions, such as insanity or duress, then it should be treated as if it were freely chosen. "It is not that the behavior is actually free in the absence of the excusing conditions," Wilson and Herrnstein note, "but that, without them, society directs its disapproval, when it punishes, at the very sources of the behavior it abhors," sources such as greed, hatred, and "other precipitating impulses toward crime."\textsuperscript{86} As long as it is no more or less severe than equity dictates, criminal punishment is not only justified as a moral matter, but should actually have at least some deterrent effect in controlling crime. In this manner, a deterministic criminology can be reconciled with the voluntaristic assumptions underlying the imposition of punishment.

Apart from this reassurance about the appropriateness of punishment and the authors' general admonition to hold the line on expanding excuses to criminal liability,\textsuperscript{87} the theory of crime causation put forth in \textit{Crime}...
and Human Nature has few implications for criminal law. Perhaps more surprisingly, given the strong policy orientation of Wilson's previous work, it has few explicit implications for any kind of public policy. Indeed, the only policy implication that Wilson and Herrnstein draw from their massive research effort is that more (of a certain kind of) research is necessary. Given their assertion that the data they present "rivet our attention on the earliest stages of the life cycle," the authors believe that if "we wish to learn more about the links between traits and circumstances—whether to understand the causes of crime or to cope with them—we must mount a more wide-ranging, sophisticated effort to learn how children grow up."

Crime and Human Nature is unlikely to have much direct effect upon popular thinking about crime because it is too difficult for all but the most dedicated lay reader to understand and assess. The prose, while clear throughout, is somewhere in the stylistic no-man's-land between a popular book and an academic text. The data are presented with an attention to detail that will make many "educated readers" begin to question their education. Technical terms such as correlations of "r = .25" or "logarithmic axis" are introduced without explanation. The formal expression of their theory of crime causation, which the authors wisely confine to an Appendix for "scholars" that "lay readers may wish . . . to skip," will be incomprehensible not only to lay readers, but to many who regard themselves as "scholars" of criminology.

The effect of Crime and Human Nature upon professional criminologists, however, is likely to be substantial. Its influence will be felt by both the psychological and sociological branches of the field and taken as encouragement by the embryonic biological branch. Psychology was heavily involved in the birth of criminology at the end of the 19th and beginning of the 20th centuries. Gradually, between the two World Wars, its attention was drawn elsewhere. The study of crime was eagerly snatched up by the newly-emerging discipline of sociology, a discipline that sought to explain human behavior by using concepts applicable to groups of people (like "social class" or "social disorganization"), rather than to individuals. Sociology became "the major parent discipline of criminology for perhaps fifty years . . . ." While others have helped to clear a path, Crime and

... mens rea. However, this is not an accurate statement of prevailing doctrine if the term mens rea is used in its technical sense." P. LOW, J. JEFFRIES & R. BONNIE, CRIMINAL LAW: CASES AND MATERIALS 627 (1982).
88. P. 509.
89. Id.
90. P. 43.
*Human Nature* is the first major attempt to return psychology to a place of prominence in the explanation of criminal behavior. The reason Wilson and Herrnstein give for this emphasis on individual rather than group factors in the development of crime is what might be termed the Fundamental Problem of contemporary criminology—"the obstinate refusal of individual differences in criminal behavior to yield to sociological explanation."\(^{92}\)

Enrico Ferri, an early criminologist, first stated the Problem. Regarding "poverty" as the most common sociological explanation for crime, he wrote:

> If you regard the general condition of misery as the sole source of criminality, then you cannot get around the difficulty that out of one thousand individuals living in misery from the day of their birth to that of their death only one hundred or two hundred become criminals. . . . If poverty were the sole determining cause, one thousand out of one thousand poor ought to become criminals. If only two hundred become criminals, while one hundred commit suicide, one hundred end as maniacs, and the other six hundred remain honest in their social condition, then poverty alone is not sufficient to explain criminality.\(^{93}\)

Psychologists have been hesitantly testing the waters of criminology for a decade now.\(^{94}\) With the publication of this book, they are likely to take the plunge and reassert themselves as having something to say about the explanation of crime, and not just something to fill in gaps where sociology fails, but something derived from basic psychological theory. As often as not these renewed efforts by psychologists may challenge or refine the assertions of Wilson and Herrnstein. But it is to the authors of *Crime and Human Nature* that psychologists will owe their promotion from behind the pillar to the head table of criminological debate.

Perhaps even more importantly to how people think about crime, *Crime and Human Nature* will confront sociological criminologists with reams of unfamiliar or ignored data. Many of the conclusions that Wilson and Herrnstein draw are arguable. And that is precisely the point: The sociological criminologist will have to *argue* what he or she has too long taken for granted. It will no longer do to assert, as Chambliss recently has, that

---

"[e]xplanations of crime must be broad-brushed," rather than involve "social psychological theories to answer the impossible question of why some people commit crime while others do not." After Wilson and Herrnstein, the question no longer seems impossible.

In the process of argument, criminologists from the sociological tradition will have to come to terms with the psychological and biological research that Wilson and Herrnstein so relentlessly lay before them. The studies will be dissected for fatal flaws, and flaws will no doubt be found among the twelve hundred investigations cited. Other studies that cannot be explained away will be reinterpreted as reflections of the operation of larger group processes. But much will remain that without dissembling can neither be dismissed as artifact nor recast as sociology. When these data—on genetics, schools, and the family, for example—are incorporated into the next generation of criminology texts, they will become part of a newly common wisdom. As this filtering takes place, Wilson and Herrnstein will have played a pivotal role in reorienting sociological criminology.

There will be a tendency on the part of many sociological criminologists, however, as least in the short run, to dismiss this book with a wave of the hand and some mutterings about the political climate. "When expectations for public policy are high," Wilson and Herrnstein note, "such as in the recent past, sociological hypotheses are in tune with the times." And when expectations for public policy are low, it will be observed, such as at present, psychological hypotheses are equally in vogue.

While the influence of the political climate on the history of ideas is beyond dispute, it would be a serious mistake to fob this book off as intellectual fashion. Any comprehensive theory of crime will contain some elements that give comfort to those of left-wing sympathies and other elements consistent with the predispositions of the right. The only way to maintain an ideologically pure perspective on crime is to ignore the other half of the evidence. The great benefit of an empirical approach to crime, honestly pursued, is that the Results section of many a Final Report has refused to yield to the ideological fervor with which the initial hypotheses were so confidently advanced.

96. P. 80.
97. See Furnham, Johnson & Rawles, The Determinants of Beliefs in Human Nature, 6 Personality & Individual Differences 675, 682 (1985) ("A strong relationship was found between political orientation and beliefs in the origins of human nature—the more right-wing (conservative) a person is in his/her voting pattern (and political beliefs) the more they tend to believe in genetic determinism for all human characteristics, including personality . . . .")