

## Theoretical Criminology

# Theory and Crime

Criminology as a field of study has been well documented by a long line of excellent and distinguished textbooks, both European and American, going back many decades.<sup>1</sup> Most of these texts concentrate on presenting *facts* known about the subject of crime. For example, they discuss the extent and distribution of criminal behaviors in society; the characteristics of criminal law and procedure; the characteristics of criminals; and the history, structure, and functioning of the criminal justice system. The theoretical material presented in these texts is usually somewhat limited. Almost all texts review the major theories about the causes of criminal behavior, and some texts present other theoretical material such as sociology of law, philosophy of punishment, or theories of correctional treatment.

As a text in theoretical criminology, this book does not concentrate on presenting the facts known about crime, although at least some of those facts are presented in the various chapters. Instead, this book concentrates on the *theories* used to explain those facts. The theories

1. Some of the textbooks in general criminology that have been published since 1992 can be mentioned: John Tierney, *Criminology*, Prentice Hall, Englewood Cliffs, N.J., 1996; Sue Titus Reid, *Crime and Criminology*, 8th ed., Brown and Benchmark, Madison, 1996; Stephen E. Brown, Finn-Aage Esbensen, and Gilbert Geis, *Criminology: Explaining Crime and Its Context*, 2nd ed., Anderson, Cincinnati, 1995; Hugh D. Barlow, *Introduction to Criminology*, 7th ed., Addison-Wesley Educational Publishers, Reading, 1995; Frank Smallegger, *Criminology Today*, Prentice Hall, Englewood Cliffs, N.J., 1995; John E. Conklin, *Criminology*, 5th ed., Prentice Hall, Englewood Cliffs, N.J., 1994; Frank Hagan, *Introduction to Criminology*, 3rd ed., Nelson-Hall, Chicago, 1994; Freda Adler, Gerhard O. W. Mueller, and William S. Laufer, *Criminology*, McGraw-Hill, New York, 1994; Piers Beirne and James Messerschmidt, *Criminology*, 2nd ed., Harcourt Brace Jovanovich, Orlando, 1994; Gennaro F. Vito, *Criminology*, Wadsworth, Belmont, Calif., 1994; Edwin H. Sutherland, Donald R. Cressey, and David F. Luckenbill, *Principles of Criminology*, General Hall, Dix Hills, N.Y., 1992; Larry J. Seigel, *Criminology*, West, St. Paul, 1992; Don C. Gibbons, *Society, Crime, and Criminal Behavior*, Prentice Hall, Englewood Cliffs, N.J., 1992; and Gresham Sykes and Francis T. Cullen, *Criminology*, Harcourt Brace Jovanovich, Fort Worth, 1992.

themselves, rather than the facts about criminality, are the focus of this book.<sup>2</sup>

A theory is a part of an *explanation*.<sup>3</sup> Basically, an explanation is a sensible way of relating some particular phenomenon to the whole world of information, beliefs, and attitudes that make up the intellectual atmosphere of a people at a particular time or place. For example, when modern people see a train move along the railroad tracks, they “explain” that phenomenon to themselves in terms of their knowledge of internal combustion engines. Primitive people also had explanations that enabled them to account for such phenomena, but they used primitive concepts such as the power of spirits or demons.

Scientific theories are one kind of explanation. In general, scientific theories make statements about *the relationships between observable phenomena*.<sup>4</sup> For example, some scientific theories in criminology make statements about the relationship between the certainty or severity of criminal punishments and the volume of criminal behaviors in society. Other scientific theories make statements about the relationship between biological, psychological, or social characteristics of individuals and the likelihood that those individuals will engage in criminal behaviors. Still other scientific theories make statements about the relationship between the social characteristics of individuals and the likelihood that those individuals will be defined and processed as criminals by the criminal justice system. All these characteristics can be observed, and so all these theories are scientific.

Because they make statements about the relationships among observable phenomena, a key characteristic of scientific theories is that they can be *falsified*.<sup>5</sup> The process of attempting to falsify a scientific theory involves systematically observing the relationships described in

2. Some recent texts that focus on theoretical material include Ronald Akers, *Criminological Theories*, 2nd ed., Roxbury, Los Angeles, 1996; Werner Einstader and Stuart Henry, *Criminological Theory: An Analysis of Its Underlying Assumptions*, Harcourt Brace College Publishers, Fort Worth, 1995; J. Robert Lilly, Francis T. Cullen, and Richard A. Ball, *Criminological Theory: Context and Consequences*, 2nd ed., Sage, Newbury Park, Calif., 1994; Franklin P. Williams III and Marilyn D. McShane, *Criminological Theory*, 2nd ed., Prentice Hall, Englewood Cliffs, N.J., 1994; Don C. Gibbons, *Talking about Crime and Criminals*, Prentice Hall General Reference, New York, 1993; Daniel J. Curran, *Theories of Crime*, Allyn & Bacon, Needham Heights, Mass., 1993; Larry Siegel, *Criminology: Theories, Patterns, and Typologies*, West, St. Paul, 1992; Randy Martin, Robert J. Mutchnick, and W. Timothy Austin, *Criminological Thought: Pioneers Past and Present*, Macmillan, New York, 1990; David Downes and Paul Rock, *Understanding Deviance*, 2nd ed., Oxford University Press, Oxford, 1988; and David A. Jones, *History of Criminology: A Philosophical Perspective*, Greenwood Press, Westport, Conn., 1986.

3. Arthur L. Stinchcombe, *Constructing Social Theories*, Harcourt, Brace & World, New York, 1968, pp. 3–5.

4. *Ibid.*, pp. 15–17.

5. *Ibid.*, pp. 5–6; Thomas J. Bernard, “Twenty Years of Testing Theories: What Have We Learned and Why,” *Journal of Research in Crime and Delinquency* 27(4): 325–47 (Nov. 1990).

the theory and then comparing those observations to arguments of the theory itself. This process is called research: That is, the assertions of the theory are tested against the observed world of the facts.<sup>6</sup> If the observations are inconsistent with the assertions of the theory, then the theory is falsified. If the observations are consistent with the assertions of the theory, then the theory becomes more credible, but it is not proved; there are always alternative theories that might also explain the same observed relationships.

A theory can gain a great deal of credibility if all the reasonable alternative theories are shown to be inconsistent with the observed world of facts. At that point the theory might simply be accepted as true. However, it is always possible that some new facts will be discovered in the future that are inconsistent with the theory, so that a new theory will be required. For example, Newton’s laws of physics were accepted as true for 200 years, but they were replaced by Einstein’s theory of relativity at the beginning of the twentieth century due to the discovery of some new facts.<sup>7</sup>

Criminology has been blessed (or cursed, depending on one’s point of view) with a very large number of scientific theories. The extent to which these theories are supported by the facts is another question entirely. Over sixty years ago Michael and Adler reviewed crime theories and concluded: “The assurance with which criminologists have advanced opinions regarding the causes of crime is in striking contrast to the worthlessness of the data upon which those opinions are based.”<sup>8</sup> Michael and Adler’s judgment was harsh even at the time, but their point should be kept in mind as the various theories are reviewed. Another point was raised more recently by Gould, who commented: “Some topics are invested with enormous social importance but blessed with very little reliable information. When the ratio of data to social impact is so low, a history of scientific attitudes may be little more than an oblique record of social change.”<sup>9</sup> It may be that the history of criminology reflects more about the changing values of the larger society than it does about the changing scientific knowledge of crime.<sup>10</sup>

6. Thomas J. Bernard and R. Richard Ritti, “The Role of Theory in Scientific Research,” in Kimberly L. Kempf, ed., *Measurement Issues in Criminology*, Springer-Verlag, New York, 1990, pp. 1–20.

7. Thomas S. Kuhn, *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago, 1969.

8. Jerome Michael and Mortimer J. Adler, *Crime, Law and Social Science*, Patterson Smith, Montclair, N.J., 1971 (1933), p. 169.

9. Stephen Jay Gould, *The Mismeasure of Man*, Norton, New York, 1981, p. 22.

10. Cf. Ysabel Rennie, *The Search for Criminal Man*, Heath, Lexington, Mass., 1973.

In the broad scope of history, there are two basic types of theories of crime. One relies on spiritual, or other-world, explanations while the other relies on natural, or this-world, explanations. Both types of theories are ancient as well as modern, but only the natural theories can be called scientific since only they focus on observable phenomena. Spiritual explanations necessarily involve elements that cannot be observed, and therefore these theories cannot be falsified. Thus, even if one considers spiritual theories as the most adequate explanation of crime, they cannot be considered scientific.

### SPIRITUAL EXPLANATIONS

Spiritual explanations of crime are part of a general view of life in which many events are believed to result from the influence of otherworldly powers. For example, primitive people regarded natural disasters such as famines, floods, and plagues as punishments for wrongs they had done to the spiritual powers.<sup>11</sup> They responded by performing sacred rites and rituals to appease those powers.

In the Middle Ages in Europe a spiritual view of the world was joined to the political and social organization of feudalism to produce the beginnings of the criminal justice system.<sup>12</sup> Originally, crime was a largely private affair in which the victim or the victim's family obtained revenge by inflicting a similar or greater harm on the offender or the offender's family. The problem was that private vengeance had a tendency to start blood feuds that could continue for many years until one or the other family was completely wiped out. The feudal lords therefore instituted methods by which God could indicate who was innocent and who was guilty. The first such method was trial by battle, in which the victim or a member of his or her family would fight the offender or a member of his or her family. Because God would give victory to the innocent party, the family of the loser would have no grounds for exacting vengeance on the winner, and the blood feuds were ended.

The problem with trial by battle was that great warriors could commit as many crimes as they wanted, secure in the knowledge that God would always give them victory. Thus, somewhat later in history, trial by ordeal was instituted. In this method the accused was subjected to difficult and painful tests, from which an innocent person (protected by God) would emerge unharmed while a guilty person would die a painful death. For example, a common method of determining whether a

11. Graeme Newman, *The Punishment Response*, Lippincott, Philadelphia, 1978, pp. 13–25.

12. Harry Elmer Barnes, *The Story of Punishment*, 2nd ed. revised, Patterson Smith, Montclair, N.J., 1972, pp. 7–10.

woman was a witch was to tie her up and throw her into the water.<sup>13</sup> If she floated she was considered innocent, but if she sank she was guilty. Other forms of ordeal included running the gauntlet and walking on fire. Trial by ordeal was condemned by the Pope in 1215 and was replaced by compurgation, in which the accused gathered together a group of twelve reputable people who would swear that he or she was innocent. The idea was that no one would lie under oath for fear of being punished by God. Compurgation ultimately evolved into testimony under oath and trial by jury.

Spiritual explanations of crime appeared in the New World in the Puritan colony on Massachusetts Bay. During the first sixty years of its existence, this colony experienced three serious "crime waves" thought to be caused by the devil. The most serious of these "crime waves" occurred in 1792, when the community was thought to have been invaded by a large number of witches.<sup>14</sup>

Our modern prison system also originated in association with a spiritual explanation of crime. Around 1790 a group of Quakers in Philadelphia conceived the idea of isolating criminals in cells and giving them only the Bible to read and some manual labor to perform. The Quakers thought criminals would then reflect on their past wrongdoings and repent.<sup>15</sup> They used the term *penitentiary* to describe their invention, a place for *penitents* who were sorry for their sins.

Today, some religious individuals and groups still attribute crime to the influence of the devil. For example, Charles Colson, who was special counsel to President Richard M. Nixon and who served seven months in prison for his part in the Watergate affair, attributes crime to sinful human nature.<sup>16</sup> He argues that religious conversion is the only "cure" for crime and spends much of his time bringing that Christian message to prisoners.

Spiritual explanations provide a way of understanding crime that is satisfactory to some people. The problem is that, because spiritual influences cannot be observed, these theories cannot be falsified. Thus these theories cannot be considered scientific, even if some thoughtful

13. Newman, op. cit., p. 97.

14. Kai T. Erikson, *Wayward Puritans*, John Wiley, New York, 1966.

15. Harry Elmer Barnes and Negley K. Teeters, *New Horizons in Criminology*, Prentice Hall, New York, 1945; Negley K. Teeters, *The Cradle of the Penitentiary: The Walnut Street Jail at Philadelphia, 1773–1835*, Temple University Press, Philadelphia, 1955.

16. Charles Colson, "Toward an Understanding of the Origins of Crime," in John Stott and Nick Miller, eds., *Crime and the Responsible Community*, Hodder and Stoughton, London, 1980. See also David R. Wilkerson, *The Cross and the Switchblade*, B. Geis, New York, 1963; Oral Roberts, *Twelve Greatest Miracles of My Ministry*, Pinoak, Tulsa, 1974, ch. 9; Gerald Austin McHugh, *Christian Faith and Criminal Justice: Toward a Christian Response to Crime and Punishment*, Paulist Press, New York, 1978.

and intelligent people believe that they represent the best explanation of crime.

### NATURAL EXPLANATIONS

Spiritual explanations make use of otherworldly powers to account for what happens; natural explanations make use of objects and events in the material world to explain the same things. Like the spiritual approach, the natural approach to explanation is ancient as well as modern.

The early Phoenicians and Greeks developed naturalistic, this-world explanations far back in their history. For example, Hippocrates (460 B.C.) provided a physiological explanation of thinking by arguing that the brain is the organ of the mind. Democritus (420 B.C.) proposed the idea of an indestructible unit of matter called the atom as central to his explanation of the world around him. With Socrates, Plato, and Aristotle, the ideas of unity and continuity came to the fore, but the essential factors in all explanations remained physical and material.

By the first century B.C. Roman thought had become thoroughly infused with naturalism. For example, Roman law combined the spiritualism of the Hebrew tradition with the naturalism of the Greek tradition to provide a natural basis for penalties as well as for rights. The Hebrew doctrine of divine sanction for law and order merged with Greek naturalism and appeared in Roman law as a justification based on the "nature of things." Later, the rule of kings by divine right became a natural law looking to the "nature of things" for its principal justification.

In the sixteenth and seventeenth centuries writers such as Hobbes, Spinoza, Descartes, and Leibniz studied human affairs as physicists study matter, impersonally and quantitatively. Modern social science continues this naturalistic emphasis. The disagreements among social scientists are well known, but at least they have in common that they seek their explanations within observable phenomena found in the physical and material world.

In criminology, as in other social sciences, modern thought has abandoned the spiritual approach as a frame of reference and adopted a naturalist, scientific approach. Within the naturalist approach, however, one can distinguish different and in some ways contradictory frames of reference, based on different ways of thinking about crime. To give some sense of the breadth of the field of criminology, three such frames of reference are identified and briefly described in the paragraphs that follow.<sup>17</sup> The first frame of reference describes criminal behavior as freely

17. For a discussion of underlying assumptions in criminological theories, see Einstadter and Henry, *op. cit.* For a complex discussion of philosophical methods in criminology involving some of the same issues, see Bruce DiCristina, *Method in Criminology: A Philosophical Primer*, Harrow and Heston, Albany, N.Y., 1995.

chosen, while the second describes it as caused by forces beyond the control of the individual. The third frame of reference views crime primarily as a function of the way the criminal law is written and enforced. Thus, it focuses on the behavior of criminal law rather than the behavior of criminals.

### CLASSICAL CRIMINOLOGY

First, there is the view that intelligence and rationality are fundamental human characteristics and are the basis for explaining human behavior. In this view humans are said to be capable of understanding themselves and of acting to promote their own best interests. Societies are formed because people rationally decide to make them according to patterns that seem "good" to them—either monarchies or republics, totalitarian dictatorships or democracies. The key to progress is said to be intelligent behavior brought about by careful training and education. Each person is said to be master of his or her fate, possessed of free will rather than driven by spirits or devils.

This is the frame of reference of classical criminology, as well as of classical thinking in other fields such as philosophy, political science, and economics. Within this frame of reference, the term "crime" is usually defined from a strictly legal point of view.<sup>18</sup> Crime may be defined as the commission of any act prohibited by criminal law, or the omission of any act required by it, and a criminal is defined as any person who commits a crime. Crime is seen as a product of the free choice of the individual, who first assesses the potential benefits of committing the crime against its potential costs. The rational response of society is to increase the costs and to decrease the benefits of crime to the point that individuals will not choose to commit crime. Within this frame of reference, then, the problem criminologists attempt to solve is to design and test a system of punishment that would result in a minimal occurrence of crime. That is, this frame of reference is concerned with theory and research on the question of deterrence.

### POSITIVIST CRIMINOLOGY

Next is the view that behavior is determined by factors beyond the individual's control. This view implies that humans are not self-determining agents free to do as they wish and as their intelligence directs. Rather, it is more accurate to say that people can only behave as they have already been determined to behave. Thinking and reasoning are actually processes of rationalization in which individuals justify their

18. Clarence R. Jeffery, "The Structure of American Criminological Thinking," *Journal of Criminal Law, Criminology and Police Science* 46: 663-64 (Jan.-Feb. 1956).

predetermined courses of action, rather than processes by which individuals freely and intelligently choose what they want to do. Humans have changed and developed through a slow process of evolution, and not because intelligence has led to increasingly rational choices.

This is the frame of reference of positivist criminology, as well as of positivist thinking in other fields such as psychology, sociology, and philosophy. These theories arose in criminology after classical theories had dominated the field for about 100 years and repeated attempts to reduce crime by making punishments more prompt, certain, and severe had failed to succeed. In a sense, these new theories were offered as explanations of why classical theories had failed: If criminal behavior was determined by factors beyond the control of the individual, then punishing that individual would not have any effect.

Within this frame of reference, the problem criminologists attempt to solve is to identify the causes of criminal behavior. The original positivist criminologists looked mainly at biological factors, but later criminologists shifted their focus to psychological and then to social factors in their attempts to find these causes. At the present time, some criminologists hold that criminal behavior can be explained by one type of factor, while other criminologists take a multiple-factor approach, holding that there are many factors that increase or decrease the likelihood of a person engaging in criminal behavior.<sup>19</sup> Consequently, most of the chapters in this book are concerned with various explanations of those causes.

Criminologists who search for the causes of criminal behavior find it difficult to work within the framework of a strictly legal definition of the term “crime,” such as used by the classical criminologists. That is because the law frequently distinguishes between legal and illegal actions on the basis of fine points (“technicalities”) that have no bearing on the causes of the behavior. The law also groups behaviors into legal categories when those behaviors are not similar to each other from the point of view of their causes. Therefore, criminologists who search for the causes of crime tend to use “natural” definitions of crime, which focus on the “nature” of the behavior itself rather than on its legal definition. Once criminologists have defined the “nature” of criminal behavior, they then can analyze what causes that behavior.

For example, Gottfredson and Hirschi describe the “nature” of crime as acts that involve simple and immediate gratification but few long-term benefits, are exciting and risky but require little skill or planning,

19. Travis Hirschi and Michael Gottfredson, eds., *Understanding Crime: Current Theory and Research*, Sage, Beverly Hills, Calif., 1980, pp. 7–19.

and generally produce few benefits for the offender while imposing many costs on the victim.<sup>20</sup> Having proposed this “natural” definition of crime, they then analyze the causes of this type of behavior among humans. Many other examples can be cited.<sup>21</sup>

### THE BEHAVIOR OF CRIMINAL LAW

Positivist theories of the causes of criminal behavior dominated criminology for over 100 years, much as classical theories dominated criminology for the 100 years before that. But like those earlier classical theories, the positivist theories do not seem to have produced the results they originally promised: to reduce and control crime. Since about 1970, some criminologists have abandoned the positivist point of view and returned to classical theories, taking the view that changes in criminal punishments can achieve the goal of crime control. But other criminologists have moved to an entirely new point of view.

These criminologists question positivist criminology’s “natural” definition of crime, which assumes that there are essential differences between criminal behavior and legal behavior, so that they have essentially different causes. In contrast, these criminologists argue that many criminal behaviors are essentially similar to legal behaviors and that they involve essentially similar causal processes. The problem these criminologists attempt to solve, then, is to explain why some behaviors are officially defined as criminal while other essentially similar behaviors are not. This leads to a second and related problem: to explain why some people are officially defined as criminals while other people who act in

20. Michael R. Gottfredson and Travis Hirschi, *A General Theory of Crime*, Stanford University Press, Stanford, Calif., 1990, pp. 15–44, 89–91.

21. For example, Mannheim (*Comparative Criminology*, Houghton Mifflin, Boston, 1965, pp. 14–15) defends the view that criminology should study all antisocial behavior, whether it is legally a crime or not. E. H. Sutherland (“White Collar Criminality,” *American Sociological Review* 5: 1–12 [Feb. 1940]) defined crime as behavior that is harmful to society and used this definition to pursue his studies on white-collar crime. Each edition of Sutherland’s text contains the statement “Obviously, legal definitions should not confine the work of the criminologist; he should be completely free to push across the barriers of legal definitions whenever he sees noncriminal behavior which resembles criminal behavior” (e.g., E. H. Sutherland and D. R. Cressey, *Criminology*, 9th ed., Lippincott, Philadelphia, 1974, p. 21). In the 10th edition of the text, however (1978, p. 23), Donald R. Cressey qualified the statement by adding the following: “It is an error, however, to call such noncriminal behavior *crime*, no matter how repulsive it may be” (see also Sutherland, Cressey and Luckenbill, op. cit., p. 20). In his own work, Cressey (*Other People’s Money*, The Free Press, Glencoe, Ill., 1953) replaced a variety of legal categories of financial crime with the concept of criminal violation of financial trust. He claimed that this definition included all forms of criminal behavior that were similar from an economic and sociological point of view, but excluded other forms of criminal behavior. He was then able to proceed with a causal analysis of this behavior. Thorsten Sellin (*Culture Conflict and Crime*, Social Science Research Council, New York, 1938) defined crime in terms of violations of group conduct norms, and Herman and Julia Schwendinger (“Defenders of Order or Guardians of Human Rights?” *Issues in Criminology* 5:123–57 [summer 1970]) defined it in terms of violations of basic human rights.

essentially similar ways are not. The theories that these criminologists propose have been described in a variety of ways but will be called "theories of the behavior of criminal law" in this book because they focus on how the criminal law itself is written and enforced.<sup>22</sup>

The criminologists who hold this view focus on the processes by which humans create the social world in which they live. They argue that the phenomenon of crime is socially constructed when a society defines certain people and actions as criminal, and that any of a wide variety of people and actions may, at one time or another, be the subject of these definitions. These criminologists therefore study the processes by which particular sets of people and actions are defined as criminal at particular times and places.

For example, consider the most serious of all crimes, murder. A classical criminologist might attempt to measure the effects of different types of enforcement and punishment policies on the incidence of murder in a society. A positivist criminologist might study the biological, psychological, or social characteristics of murderers to determine what caused their behavior. A criminologist who studies the behavior of criminal law, in contrast, might study the types of killings officially defined as murder, and attempt to determine why these killings are selected for definition as murders while other killings are not. They might also study the set of people defined as murderers by the police and courts and attempt to determine why this particular group had been selected out of all the people whose behaviors resulted in the deaths of other people.

These criminologists might study systematic differences in the enforcement of laws that result in certain groups being disproportionately processed by the criminal justice system. They might argue, for example, that wealthy and powerful groups tend to be weeded out of the criminal justice system at successive decision points, so that the end result is that poor and powerless groups are disproportionately convicted and imprisoned. Wealthy and powerful people who kill may be less likely

22. This term is derived from Donald Black, *The Behavior of Law*, Academic Press, New York, 1976. Black's term is broader in that it includes all "governmental social control." The present term includes only the criminal law and excludes other forms of governmental social control since those other forms do not influence the distribution of official crime rates. These theories have been described with a variety of terms. For example, Gresham Sykes ("The Rise of Critical Criminology," *Journal of Criminal Law and Criminology* 65: 206-13 [June 1974]) uses the term "critical criminology." The term "new criminology" has also been used to describe these theories. See Gibbons, op. cit., pp. 167-71; Charles E. Reardon, "Social Thought and Social Structure," *Criminology* 13 (3): 332-65 (Nov. 1975); Robert F. Meier, "The New Criminology," *Journal of Criminal Law and Criminology* 67: 461-69 (Dec. 1976); Eugene Doleschal and Nora Klapmuts, "Toward a New Criminology," *Crime and Delinquency Literature* 5(4): 607-26 (Dec. 1973). Both the terms *critical criminology* and *new criminology* may be misnomers (see Robert F. Bohm, "Radical Criminology: An Explication," *Criminology* 19(4): 565-89 [Feb. 1982]), but there is as yet no commonly accepted term to describe this emerging perspective.

to be arrested, tried, or convicted at all, or they may be convicted of a less serious offense and given a more lenient sentence.

These criminologists may also examine differences in the types of deaths that are defined as murders by the law. For example, *felony murder* laws make an offender liable for first-degree murder if a death results from the commission of certain "dangerous" felonies such as forcible rape, robbery, arson, or burglary. No intent to kill is required, as the intent to commit the lesser offense is transferred to the greater one.<sup>23</sup> Under this law, if a shopkeeper has a heart attack and dies while being robbed, a person could be charged with first-degree murder if he or she was driving the getaway car, did not go inside the store, and had no weapon. If convicted, such an offender could then receive the death penalty.<sup>24</sup>

In contrast with the severity of this law are the extremely lenient laws associated with serious injuries and deaths resulting from the actions of corporate executives. Even the most outrageous examples of deliberate decisions resulting in numerous injuries and deaths may not be defined as crimes at all, or, if they are defined as crimes, the penalties may be limited to a minimal and symbolic level.<sup>25</sup> Many serious injuries and deaths associated with corporate decision making occur where there is the intent to commit a lesser offense (for example, to violate health or safety laws), combined with the full knowledge that the decision may result in serious injury and death to numbers of innocent people. If a law similar to the felony murder law were applied to corporate decision making, then many corporate executives might find themselves convicted of murder and sentenced to death.

Theories of the behavior of criminal law suggest that the volume of crime and the characteristics of criminals are determined primarily by how the law is written and enforced. Most people convicted of crimes are poor, but not because poverty causes crime. Rather, the actions typical of poor people are more likely to be legally defined as crimes, and the laws applying to such crimes are more likely to be strictly enforced. Burglary, larceny, armed robbery, and auto theft are all crimes typically committed by the poor, and the laws applying to these crimes are strictly defined and enforced. Fraud, embezzlement, corruption, and other kinds of white-collar crimes are typically committed by wealthier people. But the laws applying to these crimes are neither defined nor en-

23. Hazel B. Kerper, *Introduction to the Criminal Justice System*, West, St. Paul, 1972, pp. 111-12.

24. A similar case in which the offender did receive the death penalty is *Woodson v. North Carolina*, 96 S. Ct. 2978 (1976).

25. E.g., see Gerald M. Stern, *The Buffalo Creek Disaster*, Vintage, New York, 1976; Kai T. Erikson, *Everything in Its Path*, Simon & Schuster, New York, 1976.

forced as strictly, despite the fact that these crimes can cause many serious injuries and deaths and can result in large property losses. In general, both rich and poor persons can be vicious, brutal, greedy, and deceptive, but the poor person with these characteristics is more likely to be defined as a criminal than is the rich person. Thus differences in the crime rates between rich and poor persons may primarily reflect differences in the behavior of criminal law rather than differences in the behaviors of individuals.

#### **THE RELATIONSHIP AMONG THE VARIOUS FRAMES OF REFERENCE**

Science with its naturalistic approach has abandoned the satisfying argument of spiritual explanations. To those who believe in spiritual influences, this does not invalidate their frame of reference; it only points out that scientists are unable to recognize the true sources of crime when they encounter them. Such individuals do not need, and have no interest in, the natural explanations of behavior. They are satisfied that they already have a more adequate explanation.

Something very similar also may happen with those who reject spiritual explanations and accept natural explanations but have different frames of reference. Classical criminologists may hold on to the view that crime can be judged in terms of deliberateness, intent, and understanding of right and wrong. These criminologists may view the search for the causes of crime as a fundamentally wrongheaded endeavor that produces no beneficial results. In contrast, positivist criminologists may reject both the spiritualism of some religious individuals and the free will of the classical criminologists. Within this frame of reference, however, some criminologists may focus on social factors and hold that there is little or no role for biological and psychological factors in the causes of criminal behavior. Others may argue that biological or psychological factors explain substantial amounts of criminal behavior, and social factors enter into the picture through their interaction with the biological or psychological factors. Finally, criminologists who propose theories of the behavior of criminal law may regard both classical and positivist theories as fundamentally misinterpreting the phenomenon of crime. In their view, the volume of crime in society and the characteristics of criminals are both reflections of the operations of the criminal justice system, not the behavior of individuals.

Within the naturalistic frame of reference, however, criminologists can do more than simply disagree with each other. All these theories are scientific, and so they all make assertions about relationships among observable phenomena. Criminologists therefore can systematically ob-

serve the world to see if the asserted relationships actually exist—i.e., they can conduct research. The results of research should indicate that some theories are consistent with observations in the real world, while other theories are inconsistent with them. This is the scientific process.

While this process probably works in the long run, in the short run it is often difficult to reach a conclusion about whether a particular theory is consistent with the observations. The research on a particular theory is rarely black or white—rather, there are innumerable shades of gray with some research providing support for the theory and other research tending to contradict it.<sup>26</sup> In that situation, different criminologists may reach very different conclusions about the same theories.

In the chapters that follow, the implications of some of these general propositions will be examined in much greater detail. The chapters have been organized primarily for the sake of convenience and clarity; no necessary separateness or mutual exclusiveness should be inferred. In general, the chapters are organized in the historical sequence in which the theories originated, so that the earliest theories are presented first. This is intended to provide the reader with a sense of how the field of criminology has evolved over time.

Chapters 2 and 3 focus on the classical and positive schools of criminology. These chapters present historical materials on how criminology emerged as a field of study during the eighteenth and nineteenth centuries. Chapters 4 through 17 present various specific types of criminology theories. These chapters are arranged in the order in which the types of theories emerged. For example, the earliest types of criminology theories focused on the biological and psychological characteristics of individual criminals, so the chapters covering these theories are presented first. Later types of theories tended to focus more strongly on social factors, so these are presented in later chapters. These chapters all contain modern as well as historical materials. That is, each chapter brings the work of the early theorists up to date by presenting more recent theories and research that take the same general point of view.

After presenting all the different types of theories, Chapter 18 discusses recent attempts to integrate those different types of theories into broader approaches. Finally, Chapter 19 offers some concluding thoughts on the current state of theorizing in criminology and how to advance criminology as a science.

26. As a practical matter, most criminology theories seem impossible to falsify. See Bernard, *op. cit.* As a result, the authors of the present text recommend that criminology abandon falsification itself as a criterion of scientific utility, and move to a risk factor approach (see Chapters 18 and 19).



# Classical Criminology

The literature of criminology often refers to the classical and the neo-classical schools of criminological thought. These terms or labels are used to designate some important ideas in the long history of trying to understand, and trying to do something about, crime. The classical school is usually associated with the name of the Italian scholar Cesare Bonesana, Marchese de Beccaria (1738–1794). Its later modification, the so-called neoclassical school, is very similar as far as basic ideas and conceptions about the human nature are concerned. Both represent a sort of free-will, rationalistic hedonism that is part of a tradition going back many centuries.

## THE SOCIAL AND INTELLECTUAL BACKGROUND OF CLASSICAL CRIMINOLOGY

Classical criminology emerged at a time when the naturalistic approach of the social contract thinkers was challenging the spiritualistic approach that had dominated European thinking for over a thousand years. This broad spiritualistic approach included a spiritual explanation of crime that formed the basis for criminal justice policies in most of Europe. Classical criminology was a protest against those criminal justice policies and against the spiritual explanations of crime on which they were based.

One of the most important sources for these spiritual explanations of crime was found in the theology of St. Thomas Aquinas (1225–1274), who lived 500 years before Beccaria.<sup>1</sup> Aquinas argued that there was a God-given “natural law” that was revealed by observing, though the eyes of faith, people’s natural tendency to do good rather than evil. The crim-

1. A brief review of Aquinas’s ideas can be found in Thomas J. Bernard, *The Consensus-Conflict Debate*, Columbia University Press, New York, 1983, ch. 3.

inal law was based on and reflected this “natural law.” People who commit crime (i.e., violate the criminal law) therefore also commit sin (i.e., violate the natural law). Aquinas held that crime not only harmed victims, but it also harmed criminals because it harmed their essential “humanness”—their natural tendency to do good.

This spiritual explanation of crime, and others like it, formed the basis for the criminal justice policies in Europe at the time. Because crime was identified with sin, the state had the moral authority to use many horrible and gruesome tortures on criminals. That was because the state claimed that it was acting in the place of God when it inflicted these horrible punishments on criminals. For example, Beirne quotes from the sentence that was imposed on Jean Calas in 1762, two years before Beccaria published his little book<sup>2</sup>:

. . . in a chemise, with head and feet bare, (Calas) will be taken in a cart from the palace prison to the Cathedral. There, kneeling in front of the main door, holding in his hands a torch of yellow wax weighing two pounds, he must . . . (ask) pardon of God, of the King, and of justice. Then the executioner should take him in the cart to the Place Saint Georges, where upon a scaffold his arms, legs, thighs, and loins will be broken and crushed. Finally, the prisoner should be placed upon a wheel, with his face turned to the sky, alive and in pain, and repent for his said crimes and misdeeds, all the while imploring God for his life, thereby to serve as an example and to instil terror in the wicked.

The extensive religious symbolism in the manner of execution clearly suggests that crime is intertwined with sin, and that in punishing crime, the state is taking the part of God.

Beginning with Thomas Hobbes (1588–1678), “social contract” thinkers substituted naturalistic arguments for the spiritualistic arguments of people like Aquinas.<sup>3</sup> While Aquinas argued that people naturally do good rather than evil, Hobbes argued that people naturally pursue their own interests without caring about whether they hurt anyone else. This leads to a “war of each against all” in which no one is safe because all people only look out for themselves.

Hobbes then argued that people are rational enough to realize that this situation is not in anyone’s interests. So people agree to give up their own selfish behavior as long as everyone else does the same thing

2. Piers Beirne, *Inventing Criminology*, State University of New York Press, Albany, 1993, pp. 11–12. Another widely quoted example from the same time period is the execution of Damiens, who had stabbed the king of France in 1757. See Michel Foucault, *Discipline and Punish*, Pantheon, New York, 1977, pp. 3–5.

3. A discussion of Hobbes and his relation to Aquinas can be found in Bernard, op. cit., ch. 4.

at the same time. This is what Hobbes called the “social contract”—something like a peace treaty that everyone signs because they are all exhausted from the war of each against all. But the social contract needs an enforcement mechanism in case some people cheat and begin to pursue their own interests without regard to whether other people get hurt. This is the job of the state. According to Hobbes, everyone who agrees to the social contract also agrees to grant the state the right to use force to maintain the contract.

Other social contract philosophers such as Locke (1632–1704), Montesquieu (1689–1755), Voltaire (1694–1778), and Rousseau (1712–1778) followed Hobbes in constructing philosophies that included a natural and rational basis for explaining crime and the state’s response to it. These theories differed from each other in many ways, but all were rational and naturalistic approaches to explaining crime and punishment, as opposed to the dominant spiritualistic approach. By the middle of the 1700s, just before Beccaria wrote his book, these naturalistic ideas were well known and widely accepted by the intellectuals of the day, but they did not represent the thinking of the politically powerful groups that ruled the various states in Europe. Those ruling groups still held to the spiritual explanations of crime, so that crime was seen as manifesting the work of the devil. Consequently, the criminal justice systems of the time tended to impose excessive and cruel punishments on criminals.

Beccaria was a protest writer who sought to change these excessive and cruel punishments by applying the rationalist, social contract ideas to crime and criminal justice. His book was well received by intellectuals and some reform-minded rulers who had already accepted the general framework of social contract thinking.<sup>4</sup> Even more important for the book’s acceptance, however, was the fact that the American Revolution of 1776 and the French Revolution of 1789 occurred soon after its publication in 1764.<sup>5</sup> These two revolutions were both guided by naturalistic ideas of the social contract philosophers. To these revolutionaries, Beccaria’s book represented the latest and best thinking on the subject of crime and criminal justice. They therefore used his ideas as the basis for their new criminal justice systems. From America and France, Beccaria’s ideas spread to the rest of the industrialized world.

4. Graeme Newman and Pietro Marongiu, “Penological Reform and the Myth of Beccaria,” *Criminology* 28(2): 325–46 (May 1990).

5. Beccaria’s work was extensively quoted by Thomas Jefferson, John Adams, and other American revolutionaries. See David A. Jones, *History of Criminology*, Greenwood, New York, 1986, pp. 43–46.

## BECCARIA AND THE CLASSICAL SCHOOL

Cesare Bonesana, Marchese de Beccaria, was an indifferent student who had some interest in mathematics.<sup>6</sup> After completing his formal education, he joined Alessandro Verri, an official of the prison in Milan, and his brother Pietro Verri, an economist, in a group of young men who met regularly to discuss literary and philosophical topics. Beccaria was given an assignment in March 1763 to write an essay on penology, a subject about which he knew nothing. With help from the Verri brothers, the essay was completed in January 1764, and was published under the title *Dei delitti e delle pene* (*On Crimes and Punishments*) in the small town of Livorno in July of that year, when Beccaria was 26 years old.

In common with his contemporary intellectuals, Beccaria protested against the many inconsistencies in government and in the management of public affairs. He therefore proposed various reforms to make criminal justice practice more logical and rational. He objected especially to the capricious and purely personal justice the judges were dispensing and to the severe and barbaric punishments of the time. It is interesting to look at Beccaria’s ideas as expressed in his own words in relation to some of the basic principles of his system of justice.

### 1. On the contractual society and the need for punishments<sup>7</sup>:

Laws are the conditions under which independent and isolated men united to form a society. Weary of living in a continual state of war, and of enjoying a liberty rendered useless by the uncertainty of preserving it, they sacrificed a part so that they might enjoy the rest of it in peace and safety. The sum of all these portions of liberty sacrificed by each for his own good constitutes the sovereignty of a nation, and their legitimate depository and administrator is the sovereign. But merely to have established this deposit was not enough; it had to be defended against private usurpations by individuals each of whom always tries not only to withdraw his own share but also to usurp for himself that of others. Some tangible motives had to be introduced, therefore, to prevent the despotic spirit, which is in every man, from plunging the laws of society into

6. An account of the life and work of Beccaria may be found in Beirne, op. cit., ch. 2. See also Randy Martin, Robert J. Mutchnick, and W. Timothy Austin, *Criminological Thought: Pioneers Past and Present*, Macmillan, New York, 1990; and Elio D. Monachesi, “Pioneers in Criminology: Cesare Beccaria (1738–94),” *Journal of Criminal Law, Criminology and Police Science* 46(4): 439–49 (Nov.–Dec. 1955), reprinted in Hermann Mannheim, *Pioneers in Criminology*, Patterson Smith, Montclair, N.J., 1972, pp. 36–50.

7. Cesare Beccaria, *On Crimes and Punishments*, translated by Henry Paolucci, Bobbs-Merrill, Indianapolis, 1963, pp. 11–12. This and the following quotations are reprinted with permission of the publisher, Bobbs-Merrill Educational Publishing, Inc., © 1963.

its original chaos. These tangible motives are the punishments established against infractors of the laws.

## 2. On the function of legislatures<sup>8</sup>:

Only the laws can decree punishments for crimes; authority for this can reside only with the legislator who represents the entire society united by a social contract. . . . But a punishment that exceeds the limit fixed by the laws is just punishment plus another punishment; a magistrate cannot, therefore, under any pretext of zeal or concern for the public good, augment the punishment established for a delinquent citizen.

## 3. On the function of judges<sup>9</sup>:

Judges in criminal cases cannot have the authority to interpret laws, and the reason, again, is that they are not legislators. . . . For every crime that comes before him, a judge is required to complete a perfect syllogism in which the major premise must be the general law; the minor, the action that conforms or does not conform to the law; and the conclusion, acquittal or punishment. If the judge were not constrained, or if he desired to frame even a single additional syllogism, the door would thereby be opened to uncertainty.

Nothing can be more dangerous than the popular axiom that it is necessary to consult the spirit of the laws. It is a dam that has given way to a torrent of opinions. . . . Each man has his own point of view, and, at each different time, a different one. Thus, the "spirit" of the law would be the product of a judge's good or bad logic, of his good or bad digestion; it would depend on the violence of his passions, on the weakness of the accused, on the judge's connections with him, and on all those minute factors that alter the appearances of an object in the fluctuating mind of man. . . . The disorder that arises from rigorous observance of the letter of a penal law is hardly comparable to the disorders that arise from interpretations.

## 4. On the seriousness of crimes<sup>10</sup>:

The true measure of crimes is . . . the *harm done to society*. . . . They were in error who believed that the true measure of crimes is to be found in the intention of the person who commits them. Intention depends on the impression objects actually make and on the present disposition of the mind; these vary in all men and in each man, according to the swift succession of ideas, of passions, and of circumstances. It would be necessary, therefore, to form not only a particular code for each citizen, but a new law for every crime. Some-

8. Ibid., pp. 13–14.

9. Ibid., pp. 14–15.

10. Ibid., pp. 64–65.

times, with the best intentions, men do the greatest injury to society; at other times, intending the worst for it, they do the greatest good.

## 5. On proportionate punishments<sup>11</sup>:

It is to the common interest not only that crimes not be committed, but also that they be less frequent in proportion to the harm they cause society. Therefore, the obstacles that deter man from committing crime should be stronger in proportion as they are contrary to the public good, and as the inducements to commit them are stronger. There must, therefore, be a proper proportion between crimes and punishments.

## 6. On the severity of punishments<sup>12</sup>:

For punishment to attain its end, the evil which it inflicts has only to exceed the advantage derivable from the crime; in this excess of evil one should include the certainty of punishment and the loss of the good which the crime might have produced. All beyond this is superfluous and for that reason tyrannical. . . .

The severity of punishment of itself emboldens men to commit the very wrongs it is supposed to prevent; they are driven to commit additional crimes to avoid the punishment for a single one. The countries and times most notorious for severity of penalties have always been those in which the bloodiest and most inhumane of deeds were committed, for the same spirit of ferocity that guided the hand of the legislators also ruled that of the parricide and assassin.

## 7. On the promptness of punishments<sup>13</sup>:

The more promptly and the more closely punishment follows upon the commission of a crime, the more just and useful will it be. I say more just, because the criminal is thereby spared the useless and cruel torments of uncertainty . . . [and] because privation of liberty, being itself a punishment, should not precede the sentence except when necessity requires. . . . I have said that the promptness of punishment is more useful because when the length of time that passes between the punishment and the misdeed is less, so much the stronger and more lasting in the human mind is the association of these two ideas, *crime and punishment*.

## 8. On the certainty of punishments<sup>14</sup>:

11. Ibid., p. 62.

12. Ibid., pp. 43–44.

13. Ibid., pp. 55–56.

14. Ibid., pp. 58–59.

One of the greatest curbs on crime is not the cruelty of punishments, but their infallibility. . . . The certainty of a punishment, even if it be moderate, will always make a stronger impression than the fear of another which is more terrible but combined with the hope of impunity; even the least evils, when they are certain, always terrify men's minds. . . . Let the laws, therefore, be inexorable, and inexorable their executors in particular cases, but let the legislator be tender, indulgent, and humane.

#### 9. On preventing crimes<sup>15</sup>:

It is better to prevent crimes than to punish them. That is the ultimate end of every good legislation. . . . Do you want to prevent crimes? See to it that the laws are clear and simple and that the entire force of a nation is united in their defense, and that no part of it is employed to destroy them. See to it that the laws favor not so much classes of men as men themselves. See to it that men fear the laws and fear nothing else. For fear of the laws is salutary, but fatal and fertile for crimes is one man's fear of another.

Beccaria also emphasized that the laws should be published so that the public may know what they are and support their intent and purpose; that torture and secret accusations should be abolished; that capital punishment should be abolished and replaced by imprisonment; that jails be made more humane institutions; that the law should not distinguish between wealthy and poor or between nobles and commoners; and that a person should be tried by a jury of his peers, and that when there were class differences between the offender and the victim, one half of the jury should be from the class of the offender, and the other half from the class of the victim. Beccaria summarized his ideas in a brief conclusion to his book<sup>16</sup>:

In order for punishment not to be, in every instance, an act of violence of one or of many against a private citizen, it must be essentially public, prompt, necessary, the least possible in the given circumstances, proportionate to the crimes, dictated by the laws.

Beccaria's ideas were quite radical for his time, so he published his book anonymously and defended himself in the introduction against charges that he was an unbeliever or a revolutionary. The book was condemned by the Catholic Church in 1766 for its rationalistic ideas.<sup>17</sup> But despite Beccaria's fears and some opposition, his book was extremely

15. *Ibid.*, pp. 93–94.

16. *Ibid.*, p. 99.

17. *Ibid.*, p. xi.

well received by his contemporaries. The first French translation appeared in 1766, and Voltaire provided an elaborate commentary. The first English translation appeared in 1767 under the title *An Essay on Crimes and Punishments*. In the preface to that edition, the translator noted that the book had already gone through six editions in Italian and several in French, and commented that "perhaps no book, on any subject, was ever received with more avidity, more generally read, or more universally applauded."<sup>18</sup>

Following the French Revolution of 1789 Beccaria's principles were used as the basis for the French Code of 1791.<sup>19</sup> The great advantage of this code was that it set up a procedure that was easy to administer. It made the judge only an instrument to apply the law, and the law undertook to prescribe an exact penalty for every crime and every degree thereof. Puzzling questions about the reasons for or causes of behavior, the uncertainties of motive and intent, the unequal consequences of an arbitrary rule, these were all deliberately ignored for the sake of administrative uniformity. This was the classical conception of justice—an exact scale of punishments for equal acts without reference to the individual involved or the circumstances in which the crime was committed.

As a practical matter, however, the Code of 1791 was impossible to enforce in everyday situations, and modifications were introduced. These modifications, all in the interest of greater ease of administration, are the essence of the so-called neoclassical school.

#### THE NEOCLASSICAL SCHOOL

The greatest practical difficulty in applying the Code of 1791 came from ignoring differences in the circumstances of particular situations. The Code treated everyone exactly alike, in accordance with Beccaria's argument that only the act, and not the intent, should be considered in determining the punishment. Thus first offenders were treated the same as repeaters, minors were treated the same as adults, insane the same as sane, and so on. No society, of course, will permit its children and other helpless incompetents to be treated in the same manner as its professional criminals. The French were no exception. Modifications in practice began, and soon there were revisions of the Code itself.

The Code of 1810<sup>20</sup> tipped the lid just a little in permitting some discretion on the part of the judges. In the Revised French Code of 1819

18. *Ibid.*, p. x.

19. John L. Gillin, *Criminology and Penology*, 3rd ed., Appleton-Century-Crofts, New York, 1945, p. 229.

20. In addition to the Revolutionary Code of 1791, other Napoleonic codes of the period often mentioned are Code de procédure civile, 1806; Code de commerce, 1807; Code d'instruction criminelle, 1808; the Code pénal, 1810; and the revised Code pénal, 1819.

there is definite provision for the exercise of discretion on the part of the judges in view of certain objective circumstances, but still no room for consideration of subjective intent. The set, impersonal features of even this revised *Code Napoléon* then became the point of attack for a new school of reformers whose cry was against the injustice of a rigorous code and for the need for individualization and for discriminating judgment to fit individual circumstances. These efforts at revision and refinement in application of the classical theory of free will and complete responsibility—considerations involving age, mental condition, and extenuating circumstances—constitute what is often called the neoclassical school.

Thus, the neoclassical school represented no particular break with the basic doctrine of human nature that made up the common tradition throughout Europe at the time. The doctrine continued to be that humans are creatures guided by reason, who have free will, and who therefore are responsible for their acts and can be controlled by fear of punishment. Hence the pain from punishment must exceed the pleasure obtained from the criminal act; then free will determines the desirability of noncriminal conduct. The neoclassical school therefore represented primarily the modifications necessary for the administration of the criminal law based on classical theory that resulted from practical experience.

### ASSESSING BECCARIA'S THEORY

The neoclassical view is, with minor variations, "the major model of human behavior held to by agencies of social control in all advanced industrial societies (whether in the West or the East). . . ." <sup>21</sup> Its widespread acceptance in contemporary legal systems is probably a result of the fact that this view provides support for the most fundamental assumption on which those systems are based. Classical criminology provides a general justification for the use of punishment in the control of crime. Since punishment for that purpose has always been used in the legal system, it should not be surprising that this is the theory to which legal authorities adhere.

In addition, classical theory was attractive to legal authorities for a more general reason. It is based in social contract theory, which holds that all people have a stake in the continued existence of the authority structure, since without it society would degenerate into a "war of each against all." Since crime contributed to this degeneration, it was ulti-

21. Ian Taylor, Paul Walton, and Jock Young, *The New Criminology*, Harper & Row, New York, 1973, pp. 9–10.

mately in the best interests of all people, even criminals, to obey the law. Social contract theorists saw crime as a fundamentally irrational act, committed by people who, because of their shortsighted greed and passion were incapable of recognizing their own long-term best interests. <sup>22</sup> The fact that crime was concentrated in the lower classes was taken to be a symptom of the fact that these classes were filled with irrational, dangerous people. <sup>23</sup>

The ease with which the classical system of justice could be administered rested largely on this view. It supported the uniform enforcement of laws without questioning whether those laws were fair or just. Specifically, social contract theorists did not take into account the fact that some societies are unfair. For some groups, the costs of adhering to the social contract may be few and the benefits great; for other groups, the costs may be great and the benefits few. The latter group will probably have less allegiance to the social contract, a fact that may be expressed in the form of a higher crime rate.

That is a far different perspective than the view that high-crime groups are filled with irrational and dangerous people. Rather than relying solely on punishments, it would imply that an additional way to reduce crime is to increase the benefits of adhering to the social contract among the high crime groups in society. <sup>24</sup> This option was not attractive to the social contract theorists, who were themselves members of the propertied class. Thus they addressed the problem in such a way as to justify the existence of inequalities. Hobbes, for example, argued that lower-class persons could adhere to the social contract if they were taught to believe that the status quo was inevitable. <sup>25</sup> Locke maintained that all persons were obligated to obey the laws of society, since all gave their "tacit consent" to the social contract. But he also argued that only persons with property were capable of making the laws, since only they were capable of the fully rational life and only they would defend the "natural right" of the unlimited accumulation of property. <sup>26</sup>

Beccaria's position on defending the status quo was somewhat confusing. He argued that it was natural for all to seek their own advantage, even at the expense of the common good, and that this was the source of crime. Thus he did not share the view of the social contract

22. *Ibid.*, p. 3.

23. See, for example, the discussion of Locke's view of the irrationality of the lower classes in C. B. MacPherson, *The Political Theory of Possessive Individualism*, Oxford University Press, New York, 1962, pp. 232–38.

24. E.g., James Q. Wilson, *Thinking about Crime*, Vintage, New York, 1983, pp. 117–44.

25. Macpherson, *op. cit.*, p. 98.

26. *Ibid.*, pp. 247–51.

theorists that criminals were essentially irrational. He was fully aware that the laws (which he said "have always favored the few and outraged the many") could impose massive injustices on the poor.<sup>27</sup> He went even further by arguing that the laws themselves could create crime:<sup>28</sup>

To prohibit a multitude of indifferent acts is not to prevent crimes that might arise from them, but is rather to create new ones. . . . For one motive that drives men to commit real crime there are a thousand that drive them to commit those indifferent acts which are called crimes by bad laws. . . . The majority of laws are nothing but privileges, that is, a tribute paid by all to the convenience of some few.

Thus Beccaria was not solely concerned with the establishment of a system of punishment. He recognized the problem of inequality in society, and implied that it was wrong to punish lawbreakers when the laws themselves were unjust. This aspect of Beccaria's writings is sometimes ignored, so that classical criminology is identified with the social contract position that crime is essentially irrational.<sup>29</sup> For example, Beccaria argued that the death penalty was ineffective because a thief would reason as follows:<sup>30</sup>

What are these laws that I am supposed to respect, that place such a great distance between me and the rich man? He refuses me the penny I ask of him and, as an excuse, tells me to sweat at work that he knows nothing about. Who made these laws? Rich and powerful men who have never deigned to visit the squalid huts of the poor, who have never had to share a crust of moldy bread amid the innocent cries of hungry children and the tears of a wife. Let us break these bonds, fatal to the majority and only useful to a few indolent tyrants; let us attack the injustice at its source. I will return to my natural state of independence; I shall at least for a little time live free and happy with the fruits of my courage and industry. The day will perhaps come for my sorrow and repentance, but will be brief, and for a single day of suffering I shall have many years of liberty and of pleasures.

The radical perspective of this passage is clear, as is the reason that Beccaria feared the official reaction to his book. On the other hand, the implication that Beccaria drew from this discussion was that the death penalty should be replaced by extended imprisonment at hard labor. His reasoning was that such a punishment was actually more terrible

27. Beccaria, *op. cit.*, p. 43.

28. *Ibid.*, p. 94.

29. Taylor, Walton, and Young, *op. cit.*, pp. 1-10.

30. Beccaria, *op. cit.*, p. 49.

than the death penalty, since the threat of "a great number of years, or even a whole lifetime to be spent in servitude and pain," would make a much stronger impression on a potential offender than would the threat of execution.<sup>31</sup>

Thus Beccaria seems to have implied that there are broader social causes behind the crime problem, but he did not make these arguments explicit. One of the effects of the neoclassical adaptation of Beccaria's theory was to prune carefully all of these radical elements from his work, leaving only the easily administered system of punishment as the response to crime.<sup>32</sup>

### IMPLICATIONS AND CONCLUSIONS

Beccaria's theory is sometimes portrayed as an extension of the spiritualistic thinking that was dominant at the time, but this cannot be the case. Beccaria published his book anonymously because he feared the reaction to it, and the Catholic Church placed the book on the Index of Forbidden Books where it remained for 200 years. This was because Beccaria removed all spiritual elements from his explanation of crime, and the Catholic Church considered this to be heretical at the time.

In addition, Beirne argues that Beccaria's book actually constituted a fundamental break with the concept of free will.<sup>33</sup> Beccaria's primary argument was that human behavior was predictable and controllable. In particular, he argued that if punishments were public, prompt, minimal, and proportionate, then people would commit less crime. In the view of these who held spiritualistic explanations of crime, this was a highly deterministic argument that flew in the face of the theological assertions about human free will.

Beirne therefore argues that classical theories mark the beginning of the scientific search for the causes of criminal behavior.<sup>34</sup> In Beirne's view, Beccaria's intent was precisely to move away from that "free will" stance to a deterministic one. But Beccaria did so couched carefully in the language of the time because he feared retribution. Beccaria focused on the causal impact of criminal justice policies on criminal behavior, but also pointed to factors in the larger society that also had a causal impact on crime. These included factors that reduce crime, such

31. *Ibid.*, pp. 49-50.

32. For a radical interpretation of Beccaria's theory, see Lynn McDonald, *The Sociology of Law and Order*, Faber and Faber, London, 1976, pp. 40-42. McDonald argues that Beccaria's is a "complete and recognizable conflict theory."

33. Beirne, *op. cit.*, pp. 227-28.

34. *Ibid.*, pp. 5-6. A similar but more tentative argument is found in Bob Roshier, *Controlling Crime*, Lyceum, Chicago, 1989.

as education, and those that increase it, such as poverty and economic inequality.

In that sense, Beccaria's theory really was the first step away from a pure free-will stance toward a deterministic behaviorism influenced primarily by criminal justice policies. From this point of view, there is no marked opposition between classical theories and the later positivist theories that searched for the causes of criminal behavior. Rather, this transition to positivism marks a continuing development in the direction in which Beccaria pointed.

## Positivist Criminology

Beccaria's theory changed criminal justice policies, especially in France, and led to the expectation that crime would soon decrease. But there was really no way to find out whether this occurred, since there were no annual crime statistics to measure whether crime was going up or down.

The first annual national crime statistics were published in France in 1827, about sixty years after Beccaria wrote his book.<sup>1</sup> It soon became clear that these crime statistics were astonishingly regular. The rates of crime in general and of particular crimes such as murder and rape remained relatively constant from year to year. In addition, some places in the nation had higher crime rates while others had lower, and these differences remained relatively constant from year to year.

Today, we take such regularity in crime statistics for granted, but at that time, those who held a "free will" theory of crime expected random changes in the number of crimes, especially in the number of unpremeditated crimes such as passion murders. The regularity of crime statistics suggested that Beccaria had been right in his argument that, rather than being entirely the product of free will, crime must be influenced by factors in the larger society. It also supported Beccaria's hope that, by changing those factors, crime might be reduced.

But the new crime statistics also made it clear that crime rates were going up, not down. Earlier local statistics had suggested the same thing. Even more distressing, these statistics suggested that recidivism was going up: People who had received the prompt, proportionate punishments provided by the new French code were committing more new

1. This introduction and the following discussion of Quetelet and Guerry rely heavily on the work of Piers Beirne, *Inventing Criminology*, State University of New York Press, Albany, N.Y., 1993, chps., 3, 4.

offenses rather than fewer. This suggested that Beccaria had been wrong to argue that changes in punishment policies alone could reduce crime.

The new crime statistics clearly revealed the failure of classical punishment policies, while at the same time suggesting that other social factors might influence the level of crime in society. This gave rise to a new brand of criminology, which eventually became known as positivism. Its goal was to study the causes of crime either in the larger society or in the individual.

### GUERRY AND QUETELET

The development of national crime statistics in France was part of the larger development in Europe of relatively accurate official records, as part of the development of stable social and political organization. Systematic registries of births and deaths, for example, developed in European cities and states in the 1500s.<sup>2</sup> In the 1600s various items in the official records began to be counted and compared as part of an analysis of economic conditions and their consequences. In England such studies came to be called “political arithmetic,”<sup>3</sup> while in Germany they were called “moral statistik.”<sup>4</sup> Edmund Halley (1656–1742), the astronomer for whom Halley’s comet was named, compiled and published, in 1692–93, the first systematic “life expectancy tables.”<sup>5</sup> Adam Smith used these same official data on social and economic conditions in his great work, *Inquiry into the Nature and Causes of the Wealth of Nations* (1776), as did Malthus in his controversial studies on population growth.<sup>6</sup>

Shortly after the publication of the first modern national crime statistics in France in 1827, Andre-Michel Guerry (1802–1866) published what is considered by many to be the first work in “scientific criminology.”<sup>7</sup> Guerry was a French lawyer who, soon after he took an interest in these statistics, was appointed director of criminal statistics for the French Ministry of Justice. Guerry used shaded ecological maps to represent differing crime rates in relation to various social factors. After

2. Walter F. Wilcox, “History of Statistics,” in *Encyclopedia of the Social Sciences*, vol. 14, Macmillan, New York, 1931, p. 356.

3. Bernard Lécuyer and Anthony R. Oberschall, “The Early History of Social Research,” *International Encyclopedia of the Social Sciences*, vol. 15, pp. 36–37.

4. Yale Levin and Alfred Lindesmith, “English Ecology and Criminology of the Past Century,” *Journal of Criminal Law and Criminology* 27: 801–16 (March–April 1937).

5. Lécuyer and Oberschall, op. cit., p. 37.

6. Cf. Thomas R. Malthus, *Essay on Principle of Population as It Affects the Future Improvement of Society*, London, 1798.

7. Terence Morris, *The Criminal Area*, Routledge and Kegan Paul, New York, 1957, pp. 42–53.

preliminary publication in 1829, his work appeared in expanded book form in 1833 under the title *Essai sur la statistique morale de la France*.

Guerry tested the commonly held belief that crime was associated with poverty, but he found instead that the wealthiest region of France had a higher rate of property crimes but only about half the rate of violent crime.<sup>8</sup> However, Guerry had measured wealth and poverty by the amount of direct taxation, and he pointed out that the wealthiest sections had a great deal of poverty in them. Although he did not directly measure the poverty in those wealthier provinces, he concluded that poverty itself did not cause property crime, but rather the main factor was opportunity: In the wealthier provinces there was more to steal.

Guerry also attacked the widely held view that lack of education was associated with crime.<sup>9</sup> New statistics were available on the reading and writing abilities of all young men subject to the military draft. Guerry used these statistics to determine the education levels of the various sections of France. The most educated sections were in northeast France, where almost 75 percent of young men could read and write, while the least educated sections were in western and central France, where only about 7 percent could. Guerry then showed that areas with the highest education levels had the highest rates of violent crime, while those with the lowest rates of such crime had the lowest education levels.

A second person to analyze these statistics was Adolphe Quetelet (1796–1874).<sup>10</sup> Quetelet was a Belgian mathematician and astronomer who had achieved considerable success in these fields while still quite young. In 1823, at the age of 27, the Belgian Royal Academy sent him to Paris as part of a project to build an astronomical observatory in Brussels. While there, he studied new statistical techniques that were being developed as part of “celestial mechanics.” He also became familiar with the new social data that were first being collected in France at that time, such as the numbers of births and deaths in a year. On his return to Brussels the following year, he used his newly acquired statistical techniques to analyze some of the social data—e.g., he showed that there was considerable regularity in the rates of death each year. He then argued that the regularities in this social data were analogous to the regularities found in “celestial mechanics.” He therefore used the term “social mechanics” to describe this type of analyses of social data.

8. Beirne, op. cit., pp. 119–23.

9. Ibid., pp. 124–27.

10. The following discussion is taken largely from Beirne, op. cit., pp. 65–110.



In 1828, he turned his attention to the newly published French crime statistics. He showed that there was considerable regularity throughout those statistics—e.g., in the number of people accused of crimes against property, in the number accused of crimes against persons, and in the ratio between these two numbers; in the number of those convicted, in the number acquitted, and in the ratio between those two numbers; in the ratio of males to females convicted of crimes, and in the distribution of convictions by age. He then suggested that it would be desirable to have similar statistics for other countries “to see if they follow a march as regular as the tables of mortality.”<sup>11</sup> He went on to present his basic orientation toward these statistics:

... there must be an order to those things which, when they are reproduced with astonishing constancy, and always in the same way, do not change quickly and without cause. For the moment we are adopting the role of an observer. In the study of human affairs we rely on the same principles used to study other natural causes.

Quetelet then began to analyze this data more closely. He found that some people were more likely to commit crime than others, especially those who were young, male, poor, unemployed, and undereducated. Young males were more likely to commit crime under any circumstances, so that places with more young males tended to have more crime. But places with more poverty and more unemployment actually had less crime. As it turned out, the poor and unemployed tended to commit crimes in places where there were many wealthy and employed people. So crime was higher in places with *less* poverty and unemployment, but it tended to be committed by the poor and unemployed people who lived there.

Like Guerry, Quetelet suggested that opportunities might have something to do with explaining this pattern in that wealthier cities “might attract vagabonds who hope to find impunity by losing themselves in the crowd.”<sup>12</sup> He also pointed to an additional factor: The great inequality between wealth and poverty in the same place excites passions and provokes temptations of all kinds.<sup>13</sup> This problem is especially severe in those places where rapidly changing economic conditions can result in a person suddenly passing from wealth to poverty while all around him still enjoy wealth. In contrast, provinces that were gener-

11. Quoted in Beirne, *ibid.*, pp. 78–79.

12. Adolphe Quetelet, *Research on the Propensity for Crime at Different Ages*, translated by Sawyer F. Sylvester, Anderson, Cincinnati, 1984, p. 40.

13. *Ibid.*, pp. 37–38.

ally poor and had little wealth had less crime as long as people were able to satisfy their basic needs.

Also like Guerry, Quetelet found that increased education did not reduce crime. People with more education tended to commit less crime on the whole, but they also tended to commit more violent crime. Those with less education committed more crime but it tended to be property crime. Quetelet therefore argued that increased education itself would not reduce crime.<sup>14</sup>

Quetelet concluded that the propensity to engage in crime was actually a reflection of moral character. Relying on Aristotle’s views, he identified virtue with moderation: “rational and temperate habits, more regulated passions . . . [and] foresight, as manifested by investment in savings banks, assurance societies, and the different institutions which encourage foresight.”<sup>15</sup> Young males often did not have these very virtues, and so they committed high levels of crime. Similarly, these virtues tended to break down among poor and unemployed people who were surrounded by wealth. Thus, his main policy recommendations were to enhance “moral” education and to ameliorate social conditions to improve people’s lives.<sup>16</sup>

Quetelet’s most famous and controversial statement described crime as an inevitable feature of social organization<sup>17</sup>:

The crimes which are annually committed seem to be a necessary result of our social organization. . . . *Society prepares the crime, and the guilty are only the instruments by which it is executed.*

This was an extraordinarily radical statement for the time, and Quetelet was forced to defend his theories against attacks by those who held free-will spiritual explanations of crime.<sup>18</sup> These critics saw his arguments as a deterministic heresy that necessarily implied atheism. Even worse, these critics claimed that Quetelet implied that nothing could be done to reduce crime. For example, Quetelet had argued that crime and punishment tended to be constants in a society<sup>19</sup>:

14. Beirne, *op. cit.*, pp. 83–84.

15. *Ibid.*, pp. 88–90. The idea of moderation as virtue is related to Quetelet’s conception of the “average man,” whose characteristics fall in the center of a normal distribution while “deviants” such as criminals are found at the tails. This in turn was an analogy from astronomy. See *ibid.*, pp. 82–83.

16. *Ibid.*, p. 92.

17. Quoted in Beirne, *op. cit.*, p. 88.

18. *Ibid.*, pp. 92–97.

19. Quoted in Beirne, *op. cit.*, p. 82.

The share of prisons, chains, and the scaffold appears fixed with as much probability as the revenues of the state. We are able to enumerate in advance how many individuals will stain their hands with the blood of their fellow creatures, how many will be forgers, how many poisoners, pretty nearly as one can enumerate in advance the births and deaths which must take place.

In response to these criticisms, Quetelet repeatedly affirmed his belief in God and in the individual's ability to freely choose in the face of these causal factors. In addition, he argued that his theories really were very optimistic because they indicated that there were a limited number of causes of crime. He argued that governments should continue the types of punishment policies recommended by Beccaria, but he also argued that they should undertake a variety of social reforms that would improve the conditions of people's lives and would allow the moral and intellectual qualities of citizens to flourish. In that way, the causes of crime would be reduced, and a reduction in crime itself would follow.

Quetelet retained the view throughout his life that crime essentially was caused by moral defectiveness, but increasingly took the view that moral defectiveness was revealed in biological characteristics, particularly the appearance of the face and the head.<sup>20</sup> To that extent, his theories became increasingly like his critics had described them—i.e., deterministic and pessimistic in the sense that government policies could do little to reduce crime. This also made him a direct predecessor of Lombroso, whose major book was published only two years after Quetelet's death.

### CESARE LOMBROSO

Cesare Lombroso (1835–1909) was a physician who became a specialist in psychiatry, and his principal career was as a professor of legal medicine at the University of Turin.<sup>21</sup> His name came into prominence with the publication of his book, *L'uomo delinquente (The Criminal Man)*, in 1876. In that book Lombroso proposed that criminals were biological throwbacks to an earlier evolutionary stage, people more primitive and less highly evolved than their noncriminal counterparts. Lombroso used the term *atavistic* to describe such people. The idea of evolution

20. Ibid., pp. 90–91.

21. Information about Lombroso's life and work can be found in ch. 2 of Randy Martin, Robert J. Mutchnick, and W. Timothy Austin, *Criminological Thought: Pioneers Past and Present*, Macmillan, New York, 1990; and in Marvin E. Wolfgang, "Cesare Lombroso," pp. 232–91 in Hermann Mannheim, ed., *Pioneers in Criminology*, 2nd ed., Patterson Smith, Montclair, N.J., 1972. For a more critical view, see ch. 4 of Stephen Jay Gould, *The Mismeasure of Man*, Norton, New York, 1981, where Lombroso's theory of atavism is presented in its historical and scientific context. Gould argues that scientists of the time, desiring to prove their own superiority and the inferiority of other racial and ethnic groups, cloaked their prejudices in the veil of objective science.

itself was relatively recent at the time, having first been proposed by Darwin in his book, *On the Origin of Species* (1859). That book had brought about the final break with the spiritualist, free-will thought of the past. Darwin presented evidence that humans were the same general kind of creatures as the rest of the animals, except that they were more highly evolved or developed. The ancestors of modern people were less highly evolved and were part of a continuous chain linking humans to the earliest and simplest forms of life. Even the idea that some individuals might be reversions to an earlier evolutionary stage had been originally suggested by Darwin, who had written: "With mankind some of the worst dispositions which occasionally without any assignable cause make their appearance in families, may perhaps be reversions to a savage state, from which we are not removed by many generations."<sup>22</sup>

Lombroso's theories will be presented in more detail in Chapter 4, but as a founder of the positive school of criminology he is something of an anomaly. Lombroso is known principally for the earliest formulation of his theory of the atavistic criminal. The real basis of the positive school, however, is the search for the causes of criminal behavior. That search is based on the conception of multiple factor causation, in which some of the factors may be biological, others psychological, and still others social.

Lombroso did much by way of documenting the effects of many of these factors. As his thinking changed over the years, he looked more and more to environmental rather than biological factors. This change and growth in his thinking was evidenced by the increases in the number of pages in successive editions of *L'uomo delinquente*. In its first edition in 1876, Lombroso required 252 pages to explain his theory of evolutionary atavism as the cause of crime. Twenty years later, in the fifth edition of his book, he needed over 1,900 pages to include all the items that appeared to be related to crime causation. Those included such things as climate, rainfall, the price of grain, sex and marriage customs, criminal laws, banking practices, national tariff policies, the structure of government, church organization, and the state of religious belief. Lombroso's last book, *Crime, Its Causes and Remedies*, was a summary of his life work specially prepared for American readers.<sup>23</sup> Published in 1911, two years after Lombroso's death, it includes discussions of many factors related to crime causation, of which by far the largest number are environmental rather than biological.

22. Charles Darwin, *Descent of Man*, John Murray, London, 1871, p. 137.

23. Cesare Lombroso, *Crime: Its Causes and Remedies*, 1912 edition reprinted by Patterson Smith, Montclair, N.J., 1972.

Lombroso's later, more mature thought therefore included many factors other than the physical or anthropological. He maintained that there are three major classes of criminals: (1) *born criminals*, to be understood as atavistic reversions to a lower or more primitive evolutionary form of development, and thought to constitute about one third of the total number of offenders; (2) *insane criminals*, i.e., idiots, imbeciles, paranoiacs, sufferers from melancholia, and those afflicted with general paralysis, dementia, alcoholism, epilepsy, or hysteria (strange bedfellows, to be sure); and (3) *criminaloids*, a large general class without special physical characteristics or recognizable mental disorders, but whose mental and emotional makeup are such that under certain circumstances they indulge in vicious and criminal behavior. Lombroso conceded that well over one half of all criminals were "criminaloids," so that they were not "born criminals" or "insane" in the sense that he used those terms.

By the time of Lombroso's death in 1909 it was evident that his theories were too simple and naive. Anthropology abandoned the conception of uniform, linear evolution with humans as the most highly evolved animal (and the English gentleman as the most highly evolved human), and then his notion of the atavistic criminal as a less highly evolved person became quite meaningless. Psychiatry and psychology were already marshaling evidence to show that the relationship between crime and epilepsy, or between crime and insanity, was much more complex and involved than Lombroso assumed.

Despite these criticisms, Lombroso's theory of the atavistic criminal received enormous public attention at the time. This gave it great prominence in criminology, while Guerry's and Quetelet's earlier work more or less dropped out of sight. As a result, for most of this century, Lombroso was described in criminology textbooks as the first criminologist to search for the causes of crime and therefore as the founder of positivist criminology.

Lindesmith and Levin, however, argued that Guerry's and Quetelet's earlier work had been "positivistic" in the sense that it involved a search for the causes of crime.<sup>24</sup> These criminologists noted that Guerry and Quetelet had emphasized social causes of crime, and speculated on why Lombroso's biological theory attracted so much more attention.<sup>25</sup>

It may be that the theory of the born criminal offered a convenient rationalization of the failure of preventive effort and an escape from the implication

24. Alfred Lindesmith and Yale Levin, "The Lombrosian Myth in Criminology," *American Journal of Sociology* 42: 653-71 (March 1937).

25. *Ibid.*, p. 670.

of the dangerous doctrine that crime is an essential product of our social organization. It may well be that a public, which had been nagged for centuries by reformers, welcomed the opportunity to slough off its responsibilities for this vexing problem.

Radzinowicz made a similar comment<sup>26</sup>:

It served the interests and relieved the conscience of those at the top to look upon the dangerous classes as an independent category, detached from the prevailing social conditions. They were portrayed as a race apart, morally depraved and vicious, living by violating the fundamental law of orderly society, which was that a man should maintain himself by honest, steady work.

In spite of these criticisms, Lombroso's name is one that will long be remembered as important in the development of criminological thought. As Sellin has well said<sup>27</sup>: "Any scholar who succeeds in driving hundreds of fellow students to search for the truth, and whose ideas after half a century possess vitality, merits an honorable place in the history of thought."

#### MODERN CRIMINOLOGY AS THE SEARCH FOR THE CAUSES OF CRIME

Most criminology today is positivistic in the sense that it studies the causes of crime. But there are really two different methods of studying the causes of crime and therefore two different types of theories in positivist criminology. Lombroso studied the biological, psychological, and social characteristics of individuals to identify factors that increase or decrease the likelihood the individual will engage in crime. In contrast, Quetelet studied the social characteristics of different areas of France to identify factors that are associated with high or low crime rates in those areas. These two methods do not contradict each other, but they certainly are not the same thing. Lombroso's method of studying the causes of crime is associated with *individual-level* theories of crime, while Quetelet's method is associated with *societal-level* theories of crime.<sup>28</sup>

Consider, as an analogy, methods to study the causes of unem-

26. Leon Radzinowicz, *Ideology and Crime*, Columbia University Press, New York, 1966, pp. 38-39. See also Lindesmith and Levin, *op. cit.*, p. 655.

27. Thorsten Sellin, "The Lombrosian Myth in Criminology," *American Journal of Sociology* 42: 896-97 (1937). This is a critical comment on the article by Lindesmith and Levin cited in n. 24.

28. See Thomas J. Bernard and Jeffrey Snipes, "Theoretical Integration in Criminology," in Michael Tonry, ed., *Crime and Justice: An Annual Review of Research*, vol. 20, University of Chicago Press, Chicago, 1996.

ployment. We could study why some people are unemployed while others are able to get and hold a job. If that is our purpose, then we would have to study the characteristics of unemployed people and compare them to the characteristics of employed people. A theory that emerges from our study probably would focus on factors associated with the individuals, such as education, motivation, and job skills. But we also could study why there are high unemployment rates at some times and places and low unemployment rates at other times and places. To do that, we would have to study the characteristics of times and places in which there was high unemployment, and compare them with the characteristics of times and places in which there was low unemployment. A theory that emerges from our study probably would focus on factors associated with societies, such as interest rates, budget and trade deficits, and currency exchange rates. Both would be theories of the causes of unemployment, but they would be very different types of theories because explaining why a particular person is unemployed is very different than explaining unemployment rates in a society.

A similar point can be made about theories of the causes of crime. Some individual characteristics are associated with an increased likelihood that the person will engage in criminal behavior. Much of contemporary positivist criminology, following Lombroso's lead, studies the biological, psychological, and social characteristics of individual criminals in the attempt to identify these characteristics. But some times and places have much higher crime rates than other times and places. These times and places do not simply have more people in them with the individual characteristics that are associated with criminal behavior. Rather, explaining rates of crime is different than explaining the likelihood that an individual will engage in it.

For example, in the original national crime statistics, Quetelet found what everyone already knew: that people who were poor were more likely to commit crime than people who were wealthy. But the interesting thing about Quetelet's research is that he found that regions in France with more poverty did not have more crime. In fact, places with more poverty had less crime. Places with more wealth had more crime, although the crime was predominantly committed by poor people in those places. Thus, while poverty may be a cause of crime at the individual level, it does not seem to be one at the societal level. Lombroso's method of studying individual criminals could never have found this information, since he would only find that poor individuals were more likely to commit crime.

### THE RELATION BETWEEN POSITIVIST AND CLASSICAL THEORIES

Positive criminology might seem opposed to the classical criminology presented in Chapter 2, but this is not necessarily the case. Rather, classical theories can be interpreted as implying a theory of human behavior that is quite consistent with positivism. In the past, classical criminologists have assumed that the certainty and severity of criminal punishments could affect criminal behavior, but that other variables in the environment could not. But in his defense of classical criminology, Roshier argues<sup>29</sup>:

In general, there was nothing inherent in Beccaria's intellectual position to preclude a consideration of the socio-economic context of crime, any more than there was to necessitate his sole concentration on deterrence. . . . Indeed, it is an oddity that he seemed to see the criminal justice system as being the only aspect of the environment that influences individual decisions about whether it is worthwhile to commit crime or not.

Classical criminologists therefore could expand their theoretical frame of reference and examine how crime rates are influenced by a wide range of factors outside the criminal justice system, including biological, psychological, and social factors. All these factors could then be described as "causes" of crime. Reflecting this basic position, Beirne argues that the proper place for Beccaria's theory in the history of criminology lies "at the very beginning of the tradition to which it is commonly opposed, namely, positivist criminology."<sup>30</sup>

A similar point can be made about positive criminology. In the past, positivist criminologists have assumed that biological, psychological, and social factors can influence criminal behavior, but that the certainty and severity of criminal punishments could not. But in their defense of positive criminology, Gottfredson and Hirschi argue<sup>31</sup>:

No deterministic explanation of crime can reasonably exclude the variables of the classical model on deterministic grounds. These variables may account for some of the variation in crime. If so, they have as much claim to inclusion in a "positivistic" model as any other set of variables accounting for the same amount of variation.

29. Bob Roshier, *Controlling Crime*, Lyceum, Chicago, 1989.

30. Piers Beirne, "Inventing Criminology: The 'Science of Man' in Cesare Beccaria's *Dei Delitti e Delle Pene* (1764)," *Criminology* 29(4): 777-820 (Nov. 1991).

31. Michael R. Gottfredson and Travis Hirschi, "The Positive Tradition," pp. 9-22 in Gottfredson and Hirschi, eds., *Positive Criminology*, Sage, Newburg Park, CA, 1987.

Thus, positive criminologists can include the certainty and severity of criminal punishments among the many other factors that might influence criminal behavior.

Positivist and classical criminology therefore are really part of the same enterprise—they both seek to identify the factors that influence the incidence of criminal behavior. The basic controversy between them is empirical rather than theoretical: Which factors have more influence on criminal behavior and which have less?<sup>32</sup>

### CONCLUSION

In the chapters that follow, the major theories on the causes of criminal behavior will be examined. Each of these theories suggests that certain factors, either at the individual or the societal level, might have a causal influence on crime. Research has disproven some of the earlier theories, in the sense of finding that the factors to which they point have no causal influence on crime whatsoever. Extensive research has been done on the more recent theories, but there is considerable disagreement about which factors have greater and which have lesser influence on crime.

The fact that there are no conclusive answers to the question of the causes of crime does not mean that criminology is unscientific. It is precisely because criminology theories are scientific, in the sense that they assert relationships between classes of observable phenomena, that they can be tested with research at all. Nonscientific explanations of crime, such as spiritual explanations, cannot be tested with research because they include phenomena that are not observable.

In general, the earlier chapters follow the lead of Lombroso in that they focus on the question of why one person engages in criminal behaviors while another does not. Thus, the earlier chapters emphasize factors associated with individuals, especially biological and psychological factors. Later chapters increasingly take Quetelet's approach, seeking to explain high or low crime rates by looking at factors associated with societies. But there is no absolute division between these two types of theories. Rather, it is a question of where their emphasis lies. This was true even for Lombroso and Quetelet. By the end of his life, Quetelet had included in his theory many biological factors that explained why some individuals are more likely to engage in crime, so that his theory ended up being quite similar to Lombroso's later one. And by the end of his life, Lombroso had included in his theory many soci-

32. See Bernard and Snipes, *op. cit.* This innocuous sounding statement contains major implications about the authors' view of the nature of scientific theories in criminology (see Chapter 19).

etal-level factors that seemed more appropriate for explaining rates of crime rather than the individual's propensity to engage in it. To some extent, Lombroso's theory had become like Quetelet's earlier one.

## Theories Related to Physical Appearance

One of the oldest scientific approaches in criminology theory emphasizes physical and biological abnormality as the distinguishing mark of the criminal. In this approach criminals are viewed as somehow different, abnormal, defective, and therefore inferior biologically. This biological inferiority is thought to produce certain physical characteristics that make the appearance of criminals different from that of noncriminals. Early criminologists studied the physical appearance of criminals in an attempt to identify these characteristics. The real explanation of criminal behavior, in this view, is biological defectiveness and inferiority—physical and other characteristics are only symptoms of that inferiority.

### PHYSIOGNOMY AND PHRENOLOGY

The belief that criminals and evil people in general have unusual physical appearance goes back to ancient times. For example, in *The Iliad* (Pope's translation), Homer described the evil Thersites as follows:

One eye was blinking, and one leg was lame;  
His mountain shoulders half his breast o'erspread,  
Thin hairs bestrew'd his long misshapen head.

The venerable Socrates was examined by a Greek physiognomist, who found that his face revealed him as brutal, sensuous, and inclined to drunkenness. Socrates admitted that such was his natural disposition but said he had learned to overcome these tendencies.<sup>1</sup>

1. Havelock Ellis, *The Criminal*, 2nd ed., Scribner, New York, 1900, p. 27. A rather popular, psychoanalytically oriented discussion of the symbolic meanings of physical appearance, including the tendency to link beauty to goodness and ugliness to evil, can be found in Robin Tolmach Lakoff and Raquel L. Scherr, *Face Value: The Politics of Beauty*, Routledge & Kegan Paul, Boston, 1984.

*Physiognomy*—making judgments about people's character from the appearance of their faces—was a recognized study in the Europe of Cesare Beccaria. In 1775, Johan Caspar Lavater (1741–1801), a Swiss scholar and theologian, published a four-volume work on physiognomy entitled *Physiognomical Fragments*, which received nearly as favorable attention as the now much better-known work produced by Beccaria only eleven years earlier. In this work, Lavater systematized many popular observations and made many extravagant claims about the alleged relation between facial features and human conduct. For example, beardlessness in men and its opposite, the bearded woman, were both considered unfavorable trait indicators, as were a “shifty” eye, a “weak” chin, an “arrogant” nose, and so on. Details of these classifications are of little importance now.<sup>2</sup> The principal significance of physiognomy lies in the impetus it gave to the better-organized and logically more impressive view that came to be known as phrenology.

*Phrenology* focused on the external shape of the skull instead of the appearance of the face. Based originally on Aristotle's idea of the brain as the organ of the mind, phrenologists assumed that the exterior of the skull conformed to its interior and therefore to the shape of the brain. Different faculties or functions of the mind were assumed to be associated with different parts of the brain. Therefore, the exterior shape of the skull would indicate how the mind functioned.

The eminent European anatomist Franz Joseph Gall (1758–1828) is generally given credit for the systematic development of the doctrines of phrenology, though he did not originate or make much use of that term. In 1791 he started publishing materials on the relations between head conformations and the personal characteristics of individuals. Closely allied with Gall in the development of phrenology was his student and one-time collaborator, John Gaspar Spurzheim (1776–1832). It was Spurzheim rather than Gall who carried their doctrines to England and America, lecturing before scientific meetings and stimulating interest in their ideas.

Gall listed twenty-six special faculties of the brain; Spurzheim increased the number to thirty-five.<sup>3</sup> Their lists included faculties described as amateness, conjugality, philoprogenitiveness (love of offspring), friendliness, combativeness, destructiveness, acquisitiveness, cautiousness, self-esteem, firmness, benevolence, constructiveness, ide-

2. Cf. Erik Nordenshiöld, *The History of Biology*, Knopf, New York, 1928.

3. For a history of phrenology, as well as a defense of its use in modern times, see Sybil Leek, *Phrenology*, Macmillan, New York, 1970. For a discussion of Gall and Spurzheim, see Leonard Savitz, Stanley H. Turner, and Toby Dickman, “The Origin of Scientific Criminology: Franz Joseph Gall as the First Criminologist,” in Robert F. Meier, ed., *Theory in Criminology*, Sage, Beverly Hills, Calif., 1977, pp. 41–56.

ality, and imitiveness. These were said to be grouped into three regions or compartments, one the “lower” or active propensities, another the moral sentiments, and the third the intellectual faculties. Crime was said to involve the lower propensities, notably amativeness, philoprogenitiveness, combativeness, secretiveness, and acquisitiveness. These propensities, however, could be held in restraint by the moral sentiments or the intellectual faculties, in which case no crime would be committed. Character and human conduct were thus conceived as an equilibrium in the pull of these opposite forces. Animal propensities might impel the individual to crime, but they would be opposed by the higher sentiments and intelligence. Just as other organs were strengthened by exercise and enfeebled by disuse, so were the “organs” of the mind. Careful training of the child, and even of the adult, in right living would strengthen the “organs” of desirable faculties and inhibit through disuse the lower propensities with their concomitants of crime and vice.<sup>4</sup>

The obvious scientific criticism of the phrenological theory of crime was that no one was able to observe the physiological “organs” of the mind or their relation to particular types of behavior. The most serious obstacle to its acceptance by the public, however, was the deterministic nature of its analysis. If human conduct were the result of the organs of the mind, then people’s fate was in the hands of their anatomy and physiology. This view was rejected and opposed by teachers, preachers, judges, and other leaders who influenced public opinion, because it contradicted one of their most cherished ideas, namely that humans are masters of their own conduct and capable of making of themselves what they will. It was the need to show that humans were still masters of their fate (as well as to respond to criticisms of the fatalistic position implied by his earlier work) that led Gall to publish his *Des Dispositions innées de l’âme et de l’esprit du matérialisme* (1811), in which he argued that phrenology was not fatalistic, that *will* and *spirit* were basic and supreme in the direction and control of human behavior.

#### CRIMINAL ANTHROPOLOGY: LOMBROSO TO GORING

Cesare Lombroso (1835–1909) extended the tradition of physiognomy and phrenology by studying all anatomical features of the human body, not merely the features of the face or the shape of the skull.<sup>7</sup> Lombroso was a doctor in the Italian army who was concerned about the problems, including crime, of soldiers who came from Southern Italy, in-

4. Arthur E. Fink, *The Causes of Crime: Biological Theories in the United States, 1800–1915*, University of Pennsylvania Press, Philadelphia, 1938, pp. 8–9.

cluding Sicily. At that time, the “Southern question” was a popular concern, with many allegations in the popular press and by conservative politicians that “the Southerners are inferior beings. . . lazy, incapable, criminal, and barbaric.”<sup>5</sup>

Lombroso had a flash of insight while performing a postmortem on a thief who came from Southern Italy<sup>6</sup>:

. . . on laying open the skull I found on the occipital part, exactly on the spot where a spine is found in the normal skull, a distinct depression which I named *median occipital fossa*, because of its situation precisely in the middle of the occiput as in inferior animals, especially rodents. . . At the sight of that skull, I seemed to see all of a sudden, lighted up as a vast plain under a flaming sky, the problem of the nature of the criminal—an atavistic being who reproduces in his person the ferocious instincts of primitive humanity and the inferior animals.

Lombroso went on to perform autopsies on sixty-six male criminals, and he found that these had a significant number of characteristics that were similar to primitive humans. He also examined 832 living criminals, both male and female, 390 noncriminal Italian soldiers, and ninety “lunatics.” These studies were presented in his book, *L’uomo delinquente* (*The Criminal Man*), which appeared in 1876.

Some of the physical characteristics that Lombroso linked to crime included deviations in head size and shape, asymmetry of the face, large jaws and cheekbones, unusually large or small ears or ears that stand out from the head, fleshy lips, abnormal teeth, receding chin, abundant hair or wrinkles, long arms, extra fingers or toes, or an asymmetry of the brain.<sup>7</sup> Many of these characteristics were said to resemble lower animals, such as monkeys and chimpanzees.

Lombroso’s theory generated strong reactions, both favorable and unfavorable, among his contemporaries. In response to criticisms of his theory, Lombroso offered to have an impartial committed study of 100 “born criminals,” 100 persons with criminal tendencies, and 100 normal persons. Lombroso offered to retract his theories if the physical, mental, and psychological characteristics of the three groups were found to

5. Antonio Gramsci, “Some Aspects of the Southern Question,” in Quintin Hoare, ed., *Gramsci: Selections from Political Writings*, International Publishers, New York, 1978, p. 444.

6. Cesare Lombroso, *L’uomo delinquente* (*The Criminal Man*), 4th ed., Bocca, Torino, 1889, p. 273, as quoted by Enrico Ferri, *Criminal Sociology*, D. Appleton, New York, 1900, p. 12.

7. This is a partial listing adapted from the basic work by Gina Lombroso Ferrero, *Criminal Man According to the Classification of Cesare Lombroso*, Putnam, New York, 1911, pp. 10–24; reprinted by Patterson Smith, Montclair, N.J., 1972; and summarized by John Lewis Gillin, *Criminology and Penology*, 3rd ed., Appleton Century Crofts, New York, 1945, p. 79.



be identical. This challenge was never really met, since Lombroso's opponents said it was impossible to distinguish between the three groups accurately.

However, a study by Charles Goring, begun in England in 1901 and published in 1913, was to some extent a response to Lombroso's challenge.<sup>8</sup> Goring's study was strictly a comparison between a group of convicts—persons convicted of crimes and imprisoned—and a group of unconvicted persons who included university undergraduates, hospital patients, and the officers and men of units of the British army. Thus, no attempt was made to distinguish between “born criminals,” persons with criminal tendencies, and normal persons. Also, Goring relied totally on objective measurements of physical and mental characteristics, where Lombroso had objected to such total reliance, maintaining that many anomalies were “so small as to defy all but the most minute research.”<sup>9</sup> He argued that these could be detected by the eye of the trained observer, but could not be measured. Finally the study, as it evolved, went well beyond any attempt to prove or disprove Lombroso's theories, as Goring advanced his own theory of hereditary inferiority. Goring's theory will be presented in Chapter 6; in this chapter we will concentrate on his attempt to disprove Lombroso's theory that criminals had distinct physical characteristics.

Lombroso had asserted that criminals, compared with the general population, would show anomalies (i.e., differences or defects) of head height, head width, and degree of receding forehead, as well as differences in head circumference, head symmetry, and so on. Goring, in comparing prisoners with the officers and men of the Royal Engineers, found no such anomalies. There were no more protrusions or other peculiarities of the head among the prisoners than among the Royal Engineers. Goring also compared other characteristics, such as nasal contours, color of eyes, color of hair, and left-handedness, but found only insignificant differences. He compared groups of different kinds of criminals (burglars, forgers, thieves, etc.) on the basis of thirty-seven specific physical characteristics. He concluded that there were no significant differences between one kind of criminal and another that were not more properly related to the selective effects of environmental factors.<sup>10</sup>

8. Edwin D. Driver, Introductory Essay in Charles Goring, *The English Convict: A Statistical Study*, 1913 edition reprinted by Patterson Smith, Montclair, N.J., 1972, p. vii.

9. Cesare Lombroso, *The Female Offender*, Unwin, London, 1895; quoted in Goring, op. cit., p. 16.

10. Goring, op. cit., pp. 196–214.

The one general exception to his conclusion was a consistent “inferiority in stature and in body weight.” The criminals were one to two inches shorter than noncriminals of the same occupational groups, and weighed from three to seven pounds less.<sup>11</sup> Goring was satisfied that these differences were real and significant, and he interpreted them as indicating a general inferiority of a hereditary nature. This interpretation agreed with his general thesis of hereditary inferiority (as measured by comparisons of mental ability and various other indices of hereditary influence) as the basis for criminal conduct.<sup>12</sup>

Goring has been criticized for being too anxious to disprove Lombroso's theories.<sup>13</sup> In general, this was because Goring considered Lombroso's work to be unscientific. Goring argued that “the whole of Lombroso's enterprise was conducted . . . with the unconscious intention of stamping a preconceived idea with the hall mark of science”<sup>14</sup> and that it could not be considered an impartial investigation of the theory itself. He also criticized Lombroso's willingness to declare that people who had never been involved with the law were criminals solely on the basis of their physical appearance.<sup>15</sup> Goring himself maintained that the use of the term *criminal* should reflect a legal reality—a person who has broken the law and been convicted—rather than any vague ethical or moral conception of “the kind of men who, whether they have or have not committed crime, we believe to be criminal at heart.”<sup>16</sup> Finally, he argued that even if specific differences did exist between the criminal and the noncriminal, this would not indicate that the criminal was abnormal. Rather, the criminal was “a selected class of normal man” whose “qualities may present extreme degrees from the normal average.”<sup>17</sup> Goring's point is similar to saying that professional basketball players are not tall because they are an

11. Ibid., p. 200.

12. Ibid., p. 287, especially Table 119.

13. Edwin D. Driver, “Charles Buckman Goring,” in Hermann Mannheim, ed., *Pioneers in Criminology*, Patterson Smith, Montclair, N.J., 1973, p. 440.

14. Goring, op. cit., p. 16. For more on the unscientific nature of Lombroso's theory, see Stephen Jay Gould, *The Mismeasure of Man*, Norton, New York, 1981.

15. For example, Goring (ibid., p. 15) states that “on one occasion [Lombroso] pointed out, as an example of the criminal type, a youth who had never appeared in a court of justice: ‘he may not be a legal criminal,’ was the airy utterance, ‘but he is a criminal anthropologically.’” This attitude arises from the search for the causes of crime, which tends to lead to “natural” rather than legal definitions of crime and criminals. See Chapter 1 for a discussion of this issue. See n. 22 for a discussion of a similar problem in the work of William Sheldon. For examples of modern criminologists who have a similar approach, see ch. 7 in Samuel Yochelson and Stanton E. Samenow, *The Criminal Personality*, vol. I, Jason Aronson, New York, 1976; James Q. Wilson and Richard Herrnstein, *Crime and Human Nature*, Simon & Schuster, New York, 1985; and Michael Gottfredson and Travis Hirschi, *A General Theory of Crime*, Stanford University Press, Stanford, 1990.

16. Goring, op. cit., p. 21.

17. Ibid., p. 24.



abnormal anthropological type, but because they are selected at least partially on the basis of their height.

In contrast, supporters of Lombroso maintained that Goring had actually found significant differences between criminal and noncriminal groups for a variety of measures, but that he minimized these differences by “correcting” them for such variables as age and stature. When the differences were still significant after “corrections” had been made, Goring impugned the validity of the original data. Other assessments of Goring’s work had generally found more support for Lombroso’s theories than Goring admitted.<sup>18</sup>

In spite of numerous and extensive efforts to show that criminals were somehow physically different from noncriminals, the weight of expert opinion was against the proposition, and the general conclusions of Goring on the matter came to be accepted by most modern criminologists. Goring wrote<sup>19</sup>:

We have exhaustively compared, with regard to many physical characters, different kinds of criminals with each other, and criminals, as a class, with the law-abiding public. . . . Our results nowhere confirm the evidence [of a physical criminal type], nor justify the allegation of criminal anthropologists. They challenge their evidence at almost every point. In fact, both with regard to measurements and the presence of physical anomalies in criminals, our statistics present a startling conformity with similar statistics of the law-abiding class. Our inevitable conclusion must be that *there is no such thing as a physical criminal type*.

### BODY TYPE THEORIES: SHELDON TO CORTÉS

Some of the more interesting attempts at relating criminal behavior to physical appearance are the so-called body type theories. The body type theorists argue that there is a high degree of correspondence between the physical appearance of the body and the temperament of the mind. It should be recalled that Lombroso had attempted to establish some relation between mental disorder and physical characteristics. Many others, before and after Lombroso, have made similar attempts.

The work of William Sheldon,<sup>20</sup> especially his book on delinquent youth, is a good example of a body type theory. Sheldon took his un-

18. Driver, *Introductory Essay*, op. cit., p. v.

19. Goring, op. cit., p. 173 (italics in the original).

20. William H. Sheldon (with various associates), *Psychology and the Promethean Will*, 1936; *Varieties of Human Physique*, 1940; *The Varieties of Temperament*, 1942; *Varieties of Delinquent Youth*, 1949; *Atlas of Man*, 1954. All published by Harper, New York and London. Information about the life and work of Sheldon can be found in ch. 2 of Randy Martin, Robert J. Mutchnick, and W. Timothy Austin, *Criminological Thought: Pioneers Past and Present*, Macmillan, New York, 1990. A thirty-year follow-up on Sheldon’s work can be found in Emil Hartl, *Physique and Delinquent Behavior*, Academic Press, New York, 1982.

derlying ideas and terminology of types from the fact that a human begins life as an embryo that is essentially a tube made up of three different tissue layers, namely, an inner layer (or endoderm), a middle layer (or mesoderm), and an outer layer (or ectoderm). Sheldon then constructed a corresponding physical and mental typology consistent with the known facts from embryology and the physiology of development. The endoderm gives rise to the digestive viscera; the mesoderm, to bone, muscle, and tendons of the motor-organ system; the ectoderm, to connecting tissue of the nervous system, skin, and related appendages. Sheldon’s basic type characteristics of physique and temperament are briefly summarized in the following scheme<sup>21</sup>:

#### Physique

1. *Endomorphic*: relatively great development of digestive viscera; tendency to put on fat; soft roundness through various regions of the body; short tapering limbs; small bones; soft, smooth, velvety skin.

2. *Mesomorphic*: relative predominance of muscles, bone, and the motor organs of the body; large trunk; heavy chest; large wrists and hands; if “lean,” a hard rectangularity of outline; if “not lean,” they fill out heavily.

3. *Ectomorphic*: relative predominance of skin and its appendages, which includes the nervous system; lean, fragile, delicate body; small, delicate bones; droopy shoulders; small face, sharp nose, fine hair; relatively little body mass and relatively great surface area.

#### Temperament

1. *Viscerotonic*: general relaxation of body; a comfortable person; loves soft luxury; a “softie” but still essentially an extrovert.

2. *Somotonic*: active, dynamic, person; walks, talks, gestures assertively; behaves aggressively.

3. *Cerebrotonic*: an introvert; full of functional complaints, allergies, skin troubles, chronic fatigue, insomnia; sensitive to noise and distractions; shrinks from crowds.

Each person possesses the characteristics of the three types to a greater or lesser degree. Sheldon therefore used three numbers, each between 1 and 7, to indicate the extent to which the characteristics of the three types were present in a given individual. For example, a person whose somatotype is 7-1-4 would possess many endomorphic characteristics, few mesomorphic characteristics, and an average number of ectomorphic characteristics.

Sheldon presented individual case histories, uniformly written according to a rigorous case outline, of 200 young males who had had a

21. The schematic arrangement of basic types has been constructed from the discussion in Sheldon, *Varieties of Delinquent Youth*, pp. 14-30.

period of contact, during the decade 1939–1949, with the Hayden Goodwill Inn, a small, somewhat specialized, rehabilitation home for boys in Boston. He found that these youths were decidedly high in mesomorphy and low in ectomorphy, with the average somatotype being 3.5-4.6-2.7. Sheldon had earlier studied 200 college students who were apparently nondelinquents, and had found that the average somatotype was 3.2-3.8-3.4. The difference between these two groups with respect to mesomorphy and ectomorphy is significant ( $p = 001$ ).<sup>22</sup>

The association between mesomorphy and delinquency was also found in a study by the Gluecks, who compared 500 persistent delinquents with 500 proven nondelinquents.<sup>23</sup> The two groups were matched in terms of age, general intelligence, ethnic-racial derivation, and residence in underprivileged areas. Photographs of the boys were mixed together and then visually assessed for the predominant body type.<sup>24</sup> By this method 60.1 percent of the delinquents, but only 30.7 percent of the nondelinquents, were found to be mesomorphs.<sup>25</sup> The analysis included a study of sixty-seven personality traits and forty-two sociocultural factors to determine which of these were associated with delinquency.<sup>26</sup> The Gluecks found that mesomorphs, in general, were “more highly characterized by traits particularly suitable to the commission of acts of aggression (physical strength, energy, insensitivity, the tendency to express tensions and frustrations in action), together with a relative freedom from such inhibitions to antisocial adventures as feelings of inadequacy, marked submissiveness to authority, emotional instability, and the like.”<sup>27</sup> They also found that those mesomorphs who became delinquent were characterized by a number of personality traits

22. Juan B. Cortés, *Delinquency and Crime*, Seminar Press, New York, 1972, p. 14. The definition of delinquency used in this study, however, had only a superficial resemblance to the customary use of the term in criminology. For example, Sheldon speaks of “biological delinquency,” (*Varieties of Delinquent Youth*, pp. 782–819) and “mental delinquency,” (pp. 820–83) not as criminal in the usual legal sense, but as factors to be rated in accordance with the extent to which observed behavior conforms to that which a particular constitutional type might be expected to produce. Subsequently E. H. Sutherland (“Critique of Sheldon’s *Varieties of Delinquent Youth*,” *American Sociological Review* 18: 142–48 [1951]) re-examined Sheldon’s figures, classifying each youth according to the seriousness and consistency of his delinquent behavior, as reported in the case history. This classification showed that the most delinquent of the youths were significantly more mesomorphic than the least delinquent. See Cortés, p. 17.

23. S. Glueck and E. Glueck, *Physique and Delinquency*, Harper, New York, 1956.

24. This procedure is discussed in S. Glueck and E. Glueck, *Unraveling Juvenile Delinquency*, Harvard University Press, Cambridge, Mass., 1950, pp. 192–96.

25. Glueck and Glueck, *Physique and Delinquency*, p. 9.

26. For a complete list of these traits and factors, see Glueck and Glueck, *Physique and Delinquency*, pp. 27–31.

27. *Ibid.*, p. 226.

not normally found in mesomorphs, including susceptibility to contagious diseases of childhood, destructiveness, feelings of inadequacy, emotional instability, and emotional conflicts.<sup>28</sup> In addition, three sociocultural factors—careless household routine, lack of family group recreations, and meagerness of recreational facilities in the home—were strongly associated with delinquency in mesomorphs.<sup>29</sup>

The Glueck study has been criticized because there was no control for the rapid body changes that occur in adolescence, because the method of somatotyping involved only visual assessment and not precise measurements, and because the delinquent population included only institutionalized youth.<sup>30</sup> In an attempt to overcome these problems Cortés used a precise measurement technique to somatotype 100 delinquents, of whom seventy were institutionalized and thirty were on probation or under suspended sentence. He also somatotyped 100 private high school seniors who had no record of any delinquency, and twenty institutionalized adult felons. He found that 57 percent of the delinquents were high in mesomorphy, as compared to only 19 percent of the nondelinquents.<sup>31</sup> The mean somatotype of the nondelinquents was 3.9-3.5-3.5, the mean somatotype of the delinquents was 3.5-4.4-3.1, and the mean somatotype of the criminals was 2.8-5.4-3.1.<sup>32</sup>

To determine whether body type was associated with temperament, Cortés had seventy-three boys who were clearly classified as to body type (i.e., whose predominant rating was at least 4.5 and exceeded the other two ratings by at least one-half unit) describe themselves in terms of a set of traits associated with the three temperaments. The results of this experiment show that there was a strong tendency for boys with mesomorphic physiques to describe their temperaments in terms that Sheldon had called “somotonic.” Similarly, boys with endomorphic physiques used “viscerotonic” terms and those with ectomorphic physiques used “cerebrotonic” terms to describe their temperaments.<sup>33</sup> This is exactly the relationship predicted by Sheldon. This procedure was repeated with 100 college girls and with the twenty convicted adult felons, with similar results. Finally, using McClelland’s Test for Need for Achievement, Cortés found that mesomorphy was associated with

28. *Ibid.*, p. 221.

29. *Ibid.*, p. 224.

30. These criticisms are reviewed in Cortés, *op. cit.*, pp. 19–21.

31. *Ibid.*, p. 28.

32. *Ibid.*, p. 30.

33. *Ibid.*, p. 53.

need for achievement (n Ach) and with need for power (n Power).<sup>34</sup> Cortés concluded<sup>35</sup>:

Delinquents and possibly criminals differ from nondelinquents and noncriminals in being *physically* more mesomorphic, more energetic and potentially aggressive *temperamentally*, and in showing higher need for achievement and power *motivationally*.

Cortés's conclusion may be criticized on several counts. The small number of subjects in the experiments makes such a broad generalization at least somewhat questionable. The differences in mesomorphy between the groups in this study may reflect differences in socioeconomic class rather than in criminality, since the nondelinquent group was from a private high school, and thus probably upper class, whereas most criminal and delinquent groups are predominantly lower class.<sup>36</sup> The experiments did not actually measure the temperament of the different body types, but measured self-perception of temperament, and no theoretical case is made that those who perceive themselves as energetic (mesomorphs) are more potentially aggressive than those who perceive themselves as tense and anxious (ectomorphs). The study does not directly relate delinquency and criminality to temperament and motivation. Rather, delinquency and criminality are shown to be related to mesomorphy, and mesomorphy is shown to be related to certain temperaments and motivations. The experiments linking mesomorphy to the "energetic" temperament included only seven delinquents and twenty adult criminals, an extremely small sample. It was found that mesomorphy was related to a higher need for achievement, but no significant differences between the delinquent and nondelinquent groups were observed.<sup>37</sup> Delinquents were significantly higher in need for power than nondelinquents, but no significant differences were found between body types of the nondelinquents.<sup>38</sup> This appears to be rather a mixed bag of results to support such a strong conclusion.

## CONCLUSION

The tendency to believe that outward appearance reveals inner character is still with us today. For example, in the movies and on television, the good guys are usually played by attractive actors, while the bad guys

34. *Ibid.*, pp. 88, 101.

35. *Ibid.*, p. 348 (italics in original).

36. *Ibid.*, p. 89. The author states that the nondelinquents "belong to higher social backgrounds, possess greater intelligence, and are more favored by many other variables. . . ."

37. *Ibid.*, p. 89.

38. *Ibid.*, p. 102.

are usually played by actors who are unattractive or even ugly. The tendency to believe that ugly people are bad may carry over into real life. Some studies have found a tendency in criminal courts for physically unattractive offenders to be treated as more serious criminals than average looking or attractive offenders.<sup>39</sup> Despite this tendency, there is no clear evidence that physical appearance, as such, has any consistent relation to legally defined crime.

On the other hand, theories that focus on physical appearance can be viewed more or less as a sophisticated form of shadowboxing with a more subtle and difficult problem, namely the extent to which biological differences explain differences in human behavior and particularly in criminal behavior. This more difficult problem will be explored in Chapter 6.

39. Michael Saladin, Zalman Saper, and Lawrence Breen, "Perceived Attractiveness and Attributions of Criminality: What Is Beautiful Is Not Criminal," *Canadian Journal of Criminology* 30(3): 251-59 (1988); and Victoria M. Esses and Christopher D. Webster, "Physical Attractiveness, Dangerousness, and the Canadian Criminal Code," *Journal of Applied Social Psychology* 18(12): 1017-31 (1988). In general, see Lakoff and Scherr, *op. cit.*

# Theories Related to Intelligence

Next to physical appearance, low intelligence probably has been the concept most often used to explain criminal behavior. As the simple but bold hypotheses of those who focused on physical appearance crumbled one by one (e.g., physiognomy, phrenology, atavism), the idea persisted that criminals were less intelligent than law-abiding people. The shift in emphasis from physical differences to mental differences was easy to make, for both portrayed the criminal as an inferior person. Thus the general logic of the theory remained unchanged.

Early testing of the intelligence of prisoners generally supported the hypothesis that criminals (or at least those who were incarcerated) were mentally inferior. Later studies found that most criminals had normal intelligence, and for a time the hypothesis that there was a relationship between criminality and low intelligence fell into disrepute. Since the 1970s, however, there has been renewed support for this hypothesis, particularly with respect to juvenile delinquents. The object of the present chapter is to explore these changing ideas about intelligence and crime.

## BACKGROUND IDEAS AND CONCEPTS

The language and literature of all peoples have words to describe and stories to illustrate the conduct of “dull-witted” or “slow” individuals whose intelligence is no more than that of a young child. From a spiritualistic point of view, such mentally deficient or retarded people sometimes were thought to be possessed by the devil. They were sometimes banished as “unclean” and forced into exile and almost certain death.

With the transition from spiritual explanations to naturalistic ones, ideas about this affliction were modified. Instead of being explained as curses of God, they were explained as curses of nature. Inheritance and family

line of descent became the naturalistic way of accounting for such misfortunes. This view was associated with the evolutionary theories of Charles Darwin and others in the late nineteenth century. Darwin argued that the evolution of a species proceeds through natural variations that occur among the offspring.<sup>1</sup> The weaker and the less capable offspring die off or fail to reproduce, while the stronger and more capable survive and flourish. Through this process of “natural selection” by “the survival of the fittest,” the characteristics of the more capable offspring come to dominate the species, and the species itself evolves to a more advanced state.

These were the ideas of the time, and it was natural that they would be applied to the problems of crime. One person who did this was Lombroso, as discussed in Chapters 2 and 3. But Lombroso relied on a minor point in Darwin’s theory: that certain individuals might be atavistic throwbacks to an earlier evolutionary stage. More important was the implication that, in addition to the development of superior strains of individuals who were destined to dominate the species, natural selection would result in the development of inferior strains of people who were destined to die out. While the superior strains of individuals would be characterized by many desirable traits, inferior strains would be characterized by many undesirable traits.

Richard Dugdale used this basic idea to explain the history of a family he called the “Jukes.”<sup>2</sup> As part of his work for the Prison Association of New York, Dugdale found six members of this family in a county jail in 1874. He traced the genealogy of the family back over 200 years and found a history of “pauperism, prostitution, exhaustion, disease, fornication, and illegitimacy.” He attributed this melancholy history to the “degenerate” nature of the family. His study had a striking impact on the thinking at the time, despite the fact that it was based on unreliable, incomplete, and obscure information and was filled with value judgments and unsupported conclusions. For example, Henderson, writing in 1899, cited the Jukes as typical of families of degenerates and argued that private charitable work to alleviate the suffering of these people was actually allowing them to reproduce in great numbers, resulting in “the rising tide of pauperism, insanity, and crime which threatens to overwhelm and engulf our civilization.”<sup>3</sup> He argued that this “deterio-

1. Charles R. Darwin, *On the Origin of Species*, Penguin, New York, 1968 (originally published in 1859).

2. Richard L. Dugdale, *The Jukes: A Study in Crime, Pauperism and Heredity*, Putnam, New York, 1877; reprinted by Arno, New York, 1977.

3. C. R. Henderson, “The Relation of Philanthropy to Social Order and Progress,” *Proceedings of the National Conference of Charities and Correction* 26: 1–15 (1899); partially reprinted in Fred-eric L. Faust and Paul J. Brantingham, eds., *Juvenile Justice Philosophy*, 2nd ed., West, St. Paul, 1979, pp. 48–57.

ration of the common stock" must be resisted by segregating such inferior people in institutions and not allowing them to reproduce.

These popular studies of degenerate families supported the popular opinion that criminals are what they are because they do not know enough to understand the hazardous nature of criminality or the satisfying rewards of a law-abiding life. But critical scientific judgment requires more exact and systematic procedures than were possible in such case studies before any considered conclusions can be drawn. Accurate comparisons call for exact measurements, and therefore the critical investigation of the relationship between crime and mental ability could come only after the development of intelligence tests and their applications to this problem.

### INTELLIGENCE TESTING AND CRIME

The systematic observation and recording of individual differences has been a principal concern of experimental psychologists. The exact measurement of individual differences in "reaction time" has long been commonplace in the psychological laboratory. Other and often more subtle differences have also been studied, such as the ability to memorize, to complete or to straighten out sentences, to complete pictures, to recognize the meanings of words, and to do mental arithmetic. A variety of attempts have been made to measure these differences. For example, in 1880 a German psychologist, H. Ebbinghaus (1850–1909), devised a test of the ability to memorize so that the differences observed among individuals in this respect could be expressed on a numerical scale. This is the essential idea of an intelligence test, the object of which is to express numerically differences among persons in their ability to perform a variety of "mental" operations that, taken together, are considered "intelligence" or an indicator of intelligence.<sup>4</sup>

The distinguished French psychologist Alfred Binet (1857–1911) first took intelligence testing out of the laboratory and applied it to the persisting problem of retardation in the Paris schools. In 1892 he became assistant director of the then recently founded psychological laboratory

4. For a short factual account of the development of intelligence tests, see the article by Robert L. Thorndike, "Intelligence and Intelligence Testing," in *International Encyclopedia of the Social Sciences*, Macmillan and The Free Press, New York, 1968, vol. VII, pp. 421–29. Also see textbooks on psychological testing and chapters on this subject in general psychology texts, such as Lee J. Cronbach, *Essentials of Psychological Testing*, 3rd ed., Harper & Row, New York, 1970, pp. 197–226; Philip H. DuBois, *A History of Psychological Testing*, Allyn and Bacon, Boston, 1970; David A. Goshin, *The Search for Ability*, Russell Sage, New York, pp. 19–44; Frank S. Freeman, *Theory and Practice of Psychological Testing*, Holt, Rinehart, and Winston, New York, 1962, pp. 1–23; Gardner Lindzey, Calvin S. Hall, and Richard F. Thompson, *Psychology*, 2nd ed., Worth Publishers, New York, 1978, ch. 12, pp. 351–78.

at the Sorbonne (he became director in 1894, holding that position until his death) and began his lifelong quest for a way to measure intelligence, conceived of as native ability rather than learned behavior.<sup>5</sup> He first tried to assess intelligence by measuring the volume of the skull, following the method of his countryman Paul Broca, but quickly became convinced that such methods were useless. After writing a report on his findings, he abandoned the effort.

In 1904 Binet became a member of a commission to formulate policy for the administration of special classes in the public schools of Paris and returned to the effort to measure intelligence. This time, however, he decided to take a practical approach. He assembled a large number of small tasks related to everyday life but which involved the basic reasoning processes. These were then arranged in ascending difficulty so that the first tasks could be performed by very young children while the last could be performed only by adults. In this task he had the valuable assistance and collaboration of Theodore Simon, the medical officer of the Paris schools. Their first scale of tests appeared in 1905 and was called the *Binet-Simon Scale of Intelligence*.

This scale was revised in 1908, when the concept of *mental age* was added.<sup>6</sup> Binet decided to assign an age level to each task on the test. The typical 9-year-old, for example, would be able to perform the tasks graded for age 9 or younger but not for age 10 or older. The age level of the last tasks the child could perform would then be described as his or her mental age and could be compared with his or her chronological age. In 1912 the psychologist W. Stern suggested that mental age be divided by chronological age and the results multiplied by 100. This would then be called the *intelligence quotient*, or IQ (a quotient being the answer in a division problem). Thus the typical 9-year-old who had a mental age of 9 would have an IQ of 100, smarter 9-year-olds would have IQs above 100, while duller ones would have IQs below 100.

This test was revised again shortly before Binet's death in 1911. At that time Binet expressed his reservations about the ways in which his test might be used. The test had been designed to identify children who were doing poorly in school so that they could receive special help. Binet argued that the test should not be used to identify children of superior intelligence, since it was not designed for that purpose. He also warned against using the test to label slower students as unteachable so

5. The following account is derived principally from Stephen Jay Gould, *The Mismeasure of Man*, Norton, New York, 1981, pp. 146–58.

6. This method of determining IQ has now been discarded in favor of one employing means and standard deviations. For a discussion of the present method, as well as a discussion of the problems of the mental age method, see Cronbach, *op. cit.*, pp. 215–18.

that, instead of being helped, they would be ejected from the schools. Binet was strongly committed to the view that these slower students could improve their performance if properly helped, and he set up special classes in the Paris schools for the children who did poorly on his tests. He wrote with pleasure of the success of these classes, arguing that the pupils increased not only their knowledge but their intelligence as well: "It is in this practical sense, the only one accessible to us, that we say that the intelligence of these children has been increased. We have increased the intelligence of a pupil: the capacity to learn and to assimilate instruction."<sup>7</sup> Thus Binet rejected the idea that intelligence is a fixed and inborn quantity that cannot be changed through instruction.

With the success of the Binet-Simon scale in Paris, numerous revisions, extensions, and adaptations were made in many lands. In the United States Binet's tests and articles were translated into English and popularized by H. H. Goddard of the New Jersey Training School for the Feeble Minded at Vineland. Somewhat later Lewis M. Terman of Stanford University published what became the best-known and most widely used form of the test, called the *Stanford Revision and Extension of the Binet-Simon Scale*. Binet's 1908 scale consisted of fifty-four individual tests arranged in order of difficulty so that the easiest test might be passed by a 3-year-old child, with the most difficult requiring the ability of an average adult. The Stanford Revision consisted of ninety tests, similarly arranged in order of difficulty from the 3-year-old level to that of the "superior adult."

Unlike Binet, the Americans were convinced that intelligence was a fixed and inborn quantity, so that their primary purpose in giving intelligence tests was to sort people into appropriate social roles.<sup>8</sup> Those with IQs above 115 or 120 were said to be appropriate for the professions, while IQ 75 to 85 was appropriate for semiskilled labor. Terman, for example, mentioned that "anything above 85 IQ in a barber probably represents dead waste."<sup>9</sup>

They were particularly concerned with identifying those whose intelligence was "subnormal." Their purpose, however, was the opposite of Binet's: They wished to institutionalize these people and prevent them from reproducing, much like Henderson had suggested earlier. This required that some IQ score be determined to be the dividing line between normal intelligence and feeble-mindedness. Goddard gave intel-

7. Quoted in Gould, op. cit., p. 154.

8. Lewis M. Terman, *The Measurement of Intelligence*, Houghton Mifflin, Boston, 1916, p. 17; cited in Gould, op. cit., p. 181.

9. Terman, op. cit., p. 288; quoted in Gould, op. cit., p. 182.

ligence tests to all the inmates at his institution at Vineland and to all new inmates on admission. This testing program disclosed no inmate with a mental age over 13. Goddard therefore concluded that mental age 12 (IQ 75 on the then commonly held assumption that full mental ability is reached at chronological age 16) marked the upper limit of feeble-mindedness, so that mental age 13 marked the lower limit of normal intelligence.

With that standard as the basis for comparison, Goddard and many other psychologists gave intelligence tests to the inmates of prisons, jails, hospitals, and various other public institutions. Goddard examined a large number of such studies on the intelligence of criminals.<sup>10</sup> The proportion of criminals diagnosed as feeble-minded in these studies ranged from 28 to 89 percent, with the median study finding that 70 percent of criminals were feeble-minded. Goddard therefore concluded that most criminals were feeble-minded.

Goddard also discovered a large group of "defectives" living in the pine barrens of New Jersey and traced their heritage back to a man who had had an illegitimate child by a "feeble-minded" barmaid.<sup>11</sup> Of 480 descendants of this union, Goddard claimed that 143 were feeble-minded, 36 illegitimate, 33 sexually immoral, 24 confirmed alcoholics, 3 epileptics, 3 criminals, and 8 keepers of houses of prostitution. The man later married a righteous Quaker woman, a union ultimately resulting in 496 "normal" descendants who "married into the best families of their state."

Goddard mourned the "havoc that was wrought by one thoughtless act"<sup>12</sup> and concluded that criminality and feeble-mindedness were two aspects of the same degenerate state, so that all feeble-minded people were potential criminals. Feeble-mindedness was said to be caused by a recessive gene that obeyed the normal rules of inheritance originally formulated by Gregor Mendel.<sup>13</sup> Thus Goddard argued that feeble-mindedness could be eliminated through selective breeding. This led to his recommendation that the feeble-minded be institutionalized and not allowed to reproduce.

10. H. H. Goddard, *Feeble-mindedness: Its Causes and Consequences*, Macmillan, New York, 1914; reprinted by Arno, New York, 1972.

11. H. H. Goddard, *The Kallikak Family, A Study in the Heredity of Feeble-Mindedness*, Macmillan, New York, 1912. Goddard called this family the "Kallikaks" because the name combined the Greek words for "beauty" (*kallos*) and "bad" (*kakos*). Gould, op. cit., pp. 168-71, points out that Goddard had diagnosed feeble-mindedness among this family by sight and did not administer any intelligence tests to them. Goddard also included pictures of them in his book that had been retouched to make them appear evil and retarded.

12. Goddard, *The Kallikaks*, p. 103.

13. Goddard, *Feeble-mindedness*, p. 539. See the discussion in Gould, op. cit., pp. 158-64.

These ideas dominated the thinking of mental testers for a time but were directly challenged by the results of intelligence testing administered to draftees during World War I. Following Goddard, the Army Psychological Corps at first made the conventional assumption that those of mental age 12 or below were feeble-minded and therefore not fit for military service. This procedure led to a diagnosis of feeble-mindedness for 37 percent of the whites and 89 percent of the blacks tested.<sup>14</sup> The patent fallacy of assuming that nearly one half of the population was feeble-minded was generally recognized. Thus Goddard wrote, soon after the war, "The most extreme limit that anyone has dared to suggest is that one percent of the population is feeble-minded."<sup>15</sup> He later concluded that feeble-mindedness might be remedied by education and that it was not necessary to segregate the feeble-minded in institutions and to prevent them from reproducing.<sup>16</sup> Goddard was frank about his own change of mind: "As for myself, I think I have gone over to the enemy."<sup>17</sup>

Publication of the results of World War I testing also provided a new perspective on the relationship between intelligence and crime. A number of studies were done comparing the performance of prisoners with that of draftees on intelligence tests. These studies generally found insignificant differences between the two groups,<sup>18</sup> and several studies found that prisoners actually scored higher than draftees.<sup>19</sup> As a result of such studies feeble-mindedness largely disappeared as a basis for explaining criminal behavior.

#### CURRENT CONTROVERSIES: DELINQUENCY, RACE, AND IQ

Although it is no longer believed that large numbers of criminals are feeble-minded, the IQ of criminals and delinquents has become embroiled in a more recent controversy concerning the relationship between intelligence and race. African Americans, on average, score about 15 points lower than European Americans on IQ tests. Some scholars

14. Robert M. Yerkes, ed., "Psychological Examining in the United States Army," *Memoirs of the National Academy of Sciences*, U.S. Government Printing Office, Washington, D.C., 1921, vol. 15, p. 791.

15. H. H. Goddard, "Feeble-mindedness and Delinquency," *Journal of Psycho-Asthenics* 25: 173 (1921).

16. H. H. Goddard, "Feeble-mindedness: A Question of Definition," *Journal of Psycho-Asthenics* 33: 225 (1928).

17. *Ibid.*, p. 224.

18. For example, see Simon H. Tulchin, *Intelligence and Crime*, University of Chicago Press, Chicago, 1939; reprinted 1974.

19. For example, see Carl Murchison, *Criminal Intelligence*, Clark University Press, Worcester, Mass., 1926, ch. 4.

have used the difference in IQ scores to explain the difference in crime and delinquency rates between the races. Their arguments have generally focused on the issue of delinquency rather than crime in general, and it is there that the stronger case has been made.

However, these arguments must be considered in the context of the overall controversy about the meaning of IQ scores. First, there is a controversy about whether IQ measures intelligence or whether it measures such other factors as academic achievement, reading ability, or "test-wiseness." If one assumes that IQ actually does measure intelligence, then there is a controversy about whether the tests are "culturally biased" so that the intelligence of minority groups is underreported. Finally, if there is a real difference between the intelligence of African Americans and European Americans, then there is a controversy about whether this difference is the result of genetic or environmental influence.<sup>20</sup>

The seeds of this controversy are found in a 1967 speech before the National Academy of Sciences by William Shockley, a winner of the Nobel Prize for physics for his role in the invention of the transistor.<sup>21</sup> Shockley speculated that the differences in IQ between African Americans and European Americans might be solely the result of genetic differences and that these genetic differences might also explain the differences in poverty and crime rates between these groups. He also suggested that "IQ test results may actually be a deeper measure, at least on a statistical basis, of a distribution of some more fundamental social capacity." He did not actually argue that the all-genetic model was correct, but urged that a National Study Group be set up to research the problem and to make recommendations if the IQ-Poverty-Crime problem was found to be related to genetic differences.<sup>22</sup>

In 1969 Arthur Jensen published a lengthy article in which he positively argued many of the points on which Shockley had only specu-

20. A review discussing this controversy can be found in R. A. Weinberg, "Intelligence and IQ: Landmark Issues and Great Debates," *American Psychologist* 44: 98-104 (1989).

21. W. Shockley, "A 'Try Simplest Cases' Approach to the Heredity-Poverty-Crime Problem," *Proceedings of the National Academy of Sciences* 57(6): 1767-74 (June 1967). Shockley founded a sperm bank for geniuses, with himself as the first donor, as part of his efforts to increase the genetic endowment of the human race.

22. Several such committees were set up. They concluded that this problem merited study, but denied that it was especially urgent. See "Recommendations with Respect to the Behavioral and Social Aspects of Human Genetics," *Proceedings of the National Academy of Sciences* 69: 1-3 (1972). By 1977, however, the question had become so volatile that one scholar, Herbert C. Kelman of Harvard, argued that it would seem advisable "to forgo research at this time on genetic differences in intelligence among racial groups." See Herbert C. Kelman, "Privacy and Research with Human Beings," *Journal of Social Issues* 33(3): 169-95 (1977).



lated.<sup>23</sup> Specifically, he contended that IQ tests do measure a factor that is important for performance in Western industrialized societies, and that about 80 percent of the individual differences on this score are determined by genetic rather than environmental differences. He concluded that remedial education programs had failed for precisely this reason. This article set off the large IQ controversy just mentioned.

Jensen's article was used by Gordon to argue that variations in delinquency rates are best explained by variations in IQ.<sup>24</sup> Gordon cited Jensen to the effect that IQ is largely a biological factor, and quoted several studies that support the hypothesis that delinquency is related to the biology of the individual. He pointed to the similarity between the distribution of IQ scores and the distribution of delinquency, and demonstrated that court record data from Philadelphia and national rates for commitment to training schools could be duplicated merely by assuming that all youths (both African American and European American) with IQs below a certain level, and no youths above it, became delinquent. He did not argue that such a relationship between IQ and delinquency actually exists, but that this coincidence "virtually necessitate(s) that there be some more reasonable functional relationship within sex between IQ and delinquency that is common or nearly common to both races." He went on to argue, without supporting data, that the delinquency rates of several other racial groups are also related to IQ. Japanese-, Chinese-, and Jewish-Americans have maintained low delinquency rates despite their minority group status and generally low economic position, and these groups are said to have somewhat higher IQs than European Americans. Mexican Americans are said to have both delinquency rates and average IQs somewhere in between those of African Americans and European Americans.

In a later article, Gordon responded to the frequent criticism that his results reflect differences in social class between African-American and European-American youth, and that they do not prove anything about a relationship between delinquency and intelligence.<sup>25</sup> If that were the case, Gordon reasoned, then direct measures of social class would predict delinquency better than indirect measures such as IQ. Gordon identified several measures of social class, including male income, family in-

23. A. R. Jensen, "How Much Can We Boost IQ and Scholastic Achievement?" *Harvard Educational Review* 39: 1-123 (1969).

24. Robert Gordon, "Prevalence: The Rare Datum in Delinquency Measurement and Its Implications for the Theory of Delinquency," in Malcolm W. Klein, ed., *The Juvenile Justice System*, Sage Publications, Beverly Hills, Calif., 1976, pp. 201-84.

25. Robert A. Gordon, "SES versus IQ in the Race-IQ-Delinquency Model," *International Journal of Sociology and Social Policy* 7(3): 30-96 (1987).

come, educational attainment, and occupational status. He then demonstrated that these direct measures of social class could not do what the IQ data had done: duplicate the Philadelphia juvenile court record data and the national training school commitment rates merely by assuming that all youths below a certain "class," and no youths above it, became delinquent. The social class measures that came closest to duplicating those rates were those that, according to Gordon, most closely approximated intelligence.

Additional support for the association between IQ and delinquency was presented by Travis Hirschi and Michael Hindelang, who reviewed a number of studies on the subject.<sup>26</sup> They found that low IQ was at least as important as social class or race in predicting official delinquency and that it was more important in predicting self-reported delinquency;<sup>27</sup> that delinquency is consistently related to low IQ within races and within social classes so that, for example, lower-class delinquents are more likely to have low IQs than lower-class nondelinquents;<sup>28</sup> and that the principal sociological theories of delinquency "have been saying for some time that IQ should be related to delinquency for the same reason social class is, or should be, related to it."<sup>29</sup> They argue that IQ as an explanation of crime and delinquency has been ignored in criminology because a strong bias against it arose in the early part of this century. At that time IQ as an explanation of crime and delinquency was strongly associated with the physicians (such as Goring and Goddard)

26. Travis Hirschi and Michael J. Hindelang, "Intelligence and Delinquency: A Revisionist Review," *American Sociological Review* 42: 572-87 (1977).

27. The term *official delinquency* refers to delinquent behaviors that have been recorded in the official records of criminal justice agencies and thus have become part of official delinquency statistics. *Self-reported delinquency* refers to delinquent behaviors reported by juveniles anonymously on questionnaires, and includes much behavior that is not known to criminal justice agencies.

28. The studies cited with respect to delinquency within social classes are A. J. Reiss, Jr. and A. L. Rhodes, "The Distribution of Juvenile Delinquency in the Social Structure," *American Sociological Review* 26: 720-32 (Oct. 1961). Travis Hirschi, *Causes of Delinquency*, University of California Press, Berkeley, 1969. Marvin Wolfgang, Robert M. Figlio, and Thorsten Sellin, *Delinquency in a Birth Cohort*, University of Chicago Press, Chicago, 1972; and D. J. West, *Who Becomes Delinquent?*, Heinemann, London, 1972. The studies cited for delinquency within races are Wolfgang et al., op. cit.; Hirschi, *Causes of Delinquency*; James F. Short, Jr., and Fred L. Strodbeck, *Group Process and Gang Delinquency*, University of Chicago Press, Chicago, 1965; and Jackson Toby and Marcia L. Toby, "Low School Status as a Predisposing Factor in Subcultural Delinquency," Mimeo, Rutgers University, New Brunswick, N.J., 1961.

29. Hirschi and Hindelang, op. cit., p. 579. Support for this statement is derived largely from a review of Albert Cohen's *Delinquent Boys*, The Free Press, New York, 1955. Cloward and Ohlin's theory (*Delinquency and Opportunity*, The Free Press, New York, 1960) is said to predict that higher-IQ youths are more likely to become delinquent; labeling and conflict theories are said to be consistent with the low-IQ argument, since the system is seen as discriminating against these youth; Sutherland's "differential association" theory (Edwin H. Sutherland and Donald R. Cressey, *Criminology*, Lippincott, Philadelphia, 1978, pp. 80-83) is "strictly silent" on the matter; and "social control" theories are consistent with this view, although they have not emphasized it in the past.



who had dominated the field of criminology since the time of Lombroso. The sociologists who were beginning to take over the field were eager to focus attention on the effects of social conditions and away from the characteristics of the individual. Over the previous twenty years decreasing proportions of criminals and delinquents had been reported as feeble-minded because of the repeated lowering of the "normal" mental age. Hirschi and Hindelang state that Sutherland "called attention to this twenty-year trend—which, in fact, continued for another 30 years—and allowed his readers to conclude that it would continue until the initial claims of difference between delinquents and nondelinquents had no foundation in fact."<sup>30</sup> But Hirschi and Hindelang point out that the difference between these two groups never entirely disappeared and seemed to stabilize at about eight IQ points.<sup>31</sup> Later studies have also found that more serious offenders have even lower IQ scores than minor offenders,<sup>32</sup> and that low IQ scores among small children are associated with later offending when these children become adolescents and adults.<sup>33</sup>

More recently, attention has focused on the verbal abilities of delinquents, as measured by IQ tests, and on the difference between the "verbal IQ" and the so-called "performance IQ". The verbal IQ measures the person's comprehension of language while the performance IQ measures the degree of nonverbal contact with environment and the capacity to work in concrete situations. For most people, the verbal and performance IQ scores are quite close to each other. But delinquents consistently show a large gap between the two scores, with lower verbal IQ scores but basically normal performance IQ scores.<sup>34</sup>

Quay suggests several reasons why low verbal IQ may be associated with delinquency.<sup>35</sup> First, low verbal ability may lead to school prob-

30. Hirschi and Hindelang, *op. cit.*, p. 580. The reference is to Edwin H. Sutherland, "Mental Deficiency and Crime," pp. 357–75 in Kimball Young, ed., *Social Attitudes*, Henry Holt, New York, 1931; partially reprinted in Stephen Schafer and Richard D. Knudten, eds., *Criminological Theory*, D. C. Heath, Lexington, Mass., 1977, pp. 157–60.

31. This difference does not seem to be caused by problems in the administration of the tests. See Ronald Blackburn, *The Psychology of Criminal Conduct*, John Wiley, Chichester, England, 1993, pp. 186–89.

32. Alfred Blumstein, David P. Farrington, and Soumyo Moitra, "Delinquency Careers," pp. 187–219, in Michael H. Tonry and Norval Morris, eds., *Crime and Justice: An Annual Review of Research*, University of Chicago Press, Chicago, 1985; Deborah W. Denno, *Biology and Violence*, Cambridge University Press, New York, 1990.

33. Paul D. Lipsitt, Stephen L. Buka, and Lewis P. Lipsitt, "Early Intelligence Scores and Subsequent Delinquency," *American Journal of Family Therapy* 18: 197–208 (1990); Farrington, 1989.

34. R. J. Herrnstein, "Criminogenic Traits," in James Q. Wilson and Joan Petersilia, eds., *Crime*, Institute for Contemporary Studies Press, San Francisco, 1995, pp. 49–53.

35. Herbert C. Quay, "Intelligence," pp. 106–17 in Quay, ed., *Handbook of Juvenile Delinquency*, Wiley, New York, 1987.

lems, and the school problems may then lead to delinquency. Second, low verbal abilities may be associated with a variety of other psychosocial problems, and those other problems may then lead to delinquency. Finally, low verbal abilities may lead to a failure to develop higher-order cognitive processing such as moral reasoning, empathy, and problem solving. The lack of these cognitive processes may then lead to delinquency.

Other theorists, however, point out that verbal IQ is affected by educational achievement while performance IQ is not.<sup>36</sup> This suggests that the pattern of low verbal but normal performance IQ among delinquents may simply reflect the fact that they tend to underachieve in schools, particularly if they are from the lower socioeconomic class.

### INTERPRETING THE ASSOCIATION BETWEEN DELINQUENCY AND IQ

It seems clear that, whatever it measures, low IQ scores are associated with crime and delinquency. But it is still necessary to explain why people with low IQ scores commit crimes more frequently than those with high scores. The explanation one accepts will depend to a large degree on one's view of what IQ measures.

The most common approach among those who study the IQ-delinquency relation is to assume that *IQ measures some form of abstract reasoning or problem-solving ability and that this ability is largely inherited*. Gordon, for example, assumes this perspective and suggests that ineffective child-rearing practices by low-IQ parents might be the cause of delinquency among their low-IQ children.<sup>37</sup> Hirschi and Hindelang also believe that IQ measures innate ability, but argue that IQ influences delinquency through its effect on school performance: Low IQ youths do poorly in school, which leads to anger at the school and to truancy, which then leads to delinquency.<sup>38</sup> This argument is consistent with research that shows that the school characteristics associated with educational failure are the same school characteristics associated with delinquency: high student-teacher ratios, low student attendance, high student turnover, and poor academic quality.<sup>39</sup> More recently, Got-

36. Gary Groth-Marnat, *Handbook of Psychological Assessment*, Van Nostrand Reinhold, New York, 1984, p. 76.

37. Gordon, *op. cit.*, p. 269.

38. Hirschi and Hindelang, *op. cit.*

39. D. A. Hellman and S. Beaton, "The Pattern of Violence in Urban Public Schools," *Journal of Research in Crime and Delinquency* 23: 102–27 (1986). See also Kenneth Polk, "The New Marginal Youth," *Crime and Delinquency* 30: 648–59 (1984); and W. T. Pink, "Schools, Youth, and Justice," *Crime and Delinquency* 30: 439–61 (1984).

tfredson and Hirschi have suggested that youths with low intelligence tend to seek short-term immediate gratifications, where these actions often turn out to be criminal.<sup>40</sup> A similar argument was made by Wilson and Herrnstein, who suggest that those with low IQ are inclined to commit "impulsive crimes with immediate rewards."<sup>41</sup> All of these interpretations assume that IQ scores measure some form of innate ability.

In a second approach, it could be argued that *IQ does not measure innate ability, but instead measures qualities that are related to the dominant culture*. Jane Mercer illustrated the meaning of cultural bias by constructing a test of simple behavioral tasks related to intelligence, such as being able to tie one's own shoes by the age of 7.<sup>42</sup> The test was given to samples of lower-class African Americans and Mexican Americans, and middle-class European Americans, all of whom had IQs below 70. Of the African Americans, 91 percent were able to pass the test, of the Mexican Americans, 61 percent passed, whereas none of the European Americans did. This would indicate that many African Americans and Mexican Americans may be more intelligent than would appear from their IQ scores.

A third approach would be to argue that *IQ measures general abilities, but that those abilities are largely determined by the person's environment*. Simons criticized Hirschi and Hindelang's interpretation of the relationship between IQ and delinquency by citing this literature.<sup>43</sup> He cited a number of studies that reported IQ gains averaging about 15 points when low-IQ, lower-class children were placed in special classes, where most of those gains were produced in about one year's time. Hirschi and Hindelang had reported an average gap of only 8 points between delinquents and nondelinquents. Simons concluded that IQ is best viewed as "a broad set of verbal and problem-solving skills which are better labeled academic aptitude or scholastic readiness." He pointed out that the questions on standard verbal intelligence tests are

40. Michael R. Gottfredson and Travis Hirschi, *A General Theory of Crime*, Stanford University Press, Stanford, 1990.

41. James Q. Wilson and Richard J. Herrnstein, *Crime and Human Nature*, Simon & Schuster, New York, 1985.

42. Jane Mercer, "IQ: The Lethal Label," *Psychology Today*, Sept. 1972, pp. 44-47ff. For a critique of Mercer, see Robert A. Gordon, "Examining Labelling Theory: The Case of Mental Retardation," in Walter R. Gove, ed., *The Labelling of Deviance: Evaluating a Perspective*, Halsted-Wiley, New York, 1975, pp. 35-81.

43. Ronald L. Simons, "The Meaning of the IQ-Delinquency Relationship," *American Sociological Review* 43: 268-70 (April 1978). See also Scott Menard and Barbara J. Morse, "A Structuralist Critique of the IQ-Delinquency Hypothesis: Theory and Evidence," *American Journal of Sociology* 89(6): 1347-78 (May 1984). They argue that IQ exerts no causal influence on delinquent behavior but is a criterion used for differential treatment in certain institutional settings.

virtually indistinguishable from those on reading comprehension tests, and that the score distributions from the two types of tests are virtually identical. He also cited a study that showed that children in the early grades of lower-class African-American schools and of middle-class African-American schools had similar reading comprehension test scores, but by the eighth grade there were large differences between the two groups. That suggests that the lower-class children's interactions with their schools stagnated their growth, and that they were not mentally inferior to begin with. Finally, Simons pointed out that delinquents are almost always described as unmotivated students, and asked why anyone would think that these students would be motivated to perform to the best of their ability on the day the IQ tests are administered when they are not motivated to do so on any other school day.

### THE BELL CURVE

The IQ controversy was reignited recently by the publication of *The Bell Curve* by Herrnstein and Murray.<sup>44</sup> These authors argue that intelligence as measured by IQ tests is quite important for functioning in the modern world, that there are large differences in intelligence among individuals, that those differences are largely inherited, and that attempts to raise the IQ of low-IQ persons through education have largely failed. They go on to argue that forces are operating to reduce the collective IQ of the American people. High-IQ people control the economy and the larger society, but they tend to have fewer children and to have them at older ages, so that they are shrinking as a proportion of the population. At the same time, low-IQ people have more children and have them at younger ages, so that their proportion of the population is increasing. The result is American society that is both "dumbing down" and becoming polarized into two very different groups. Herrnstein and Murray's argument was primarily directed at the class polarization of intelligence, but they included a lengthy discussion of the biological basis of racial differences in IQ scores and also argued that low IQ is linked to crime and delinquency.

The American Psychological Association appointed a task force to examine these assertions. The task force concluded that Herrnstein and Murray's book was the most comprehensive review and discussion of the subject to date, but that its major conclusions were wrong.<sup>45</sup> In par-

44. Richard J. Herrnstein and Charles Murray, *The Bell Curve: Intelligence and Class Structure in American Life*, Free Press, New York, 1994.

45. For an overview of the findings, see Tori DeAngelis, "Psychologists Question Findings of *Bell Curve*," *The APA Monitor* 26(10): 7 (1995). For the full report, see Ulrich Neisser et al., "Intelligence: Known and Unknowns," *The American Psychologist* 51(2): 77-101 (Feb. 1996).

ticular, they pointed out that if Herrnstein and Murray were right, then average IQ scores in the entire society should be declining over time (i.e., the “dumbing down” hypothesis), while race and class differences in IQ scores should be increasing (i.e., the “increasing polarization” hypothesis). But average IQ scores in the United States have increased slightly since the 1930s, which is the opposite of Herrnstein and Murray’s “dumbing down” hypothesis. Also in the 1930s, there was an average 12.5 point gap in IQ scores between those with high status jobs and those with the low status jobs, but the most recent data show that this gap has shrunk to 8.5 points. In addition, the difference between African-American and European-American IQ scores has shrunk, although the data on racial IQ scores only goes back to the 1970s. This shrinking difference is particularly apparent in verbal IQ scores, which probably reflects changes in education associated with desegregation of schools and increased African-American attendance in colleges.

## CONCLUSION

All this suggests that the overall differences in IQ scores between delinquents and nondelinquents probably reflect environmental rather than genetic factors. In particular, it suggests that the differences in verbal IQ scores reflect the underachievement of delinquents in schools rather than any genetic inferiority.

It is interesting to note that other attempts have been made to identify as racially inferior those ethnic groups whose children had high delinquency rates.<sup>46</sup> This practice goes back at least as far as the 1820s, when delinquency in New York was seen primarily as the result of inferior racial stock of the Irish.<sup>47</sup> After IQ tests were developed at the beginning of this century, they were used in an attempt to demonstrate the racial inferiority of the Southern and Eastern European peoples who at that time were immigrating in large numbers to the United States. For example, in six separate studies Italian-American children were found to have a median IQ of 84, or 16 points below the U.S. average; this is almost identical to the median IQ of African-American children today.<sup>48</sup> As a result of these and other similar studies the Johnson-Lodge

46. For a description of the succession of dominant delinquent groups in Chicago, see Clifford R. Shaw and Henry D. McKay, *Juvenile Delinquency and Urban Areas*, University of Chicago Press, Chicago, 1969, pp. 374–75.

47. Harold Finestone, *Victims of Change*, Greenwood Press, Westport, Conn., 1976, pp. 17–36.

48. R. Pinter, *Intelligence Testing: Methods and Results*, Holt, New York, 1923, cited in Paul R. Ehrlich and S. Shirley Feldman, *The Race Bomb*, Quadrangle, New York, 1977. Of course, in 1923 mental age was still being used in IQ testing, and the various newer and more sophisticated testing techniques had not yet been developed, but this does not affect the point made above, that IQ has long been used in the United States to demonstrate racial inferiority.

Immigration Act of 1924 was passed, with the explicit intention of limiting the immigration of these “biologically inferior” people.<sup>49</sup>

Thus the use of IQ tests in the attempt to demonstrate the genetic inferiority of certain groups is nothing new. Current assertions about an IQ-race-delinquency link will require reinterpretation if African- and Hispanic-American peoples, like their immigrant predecessors, are eventually assimilated into the nation’s population and their children are no longer overrepresented in the juvenile courts. The most that can be said at present is that IQ tests have functioned, since their development, as a good predictor of delinquency. Youths with low scores on these tests have a higher likelihood of becoming delinquent than youths with high scores. But it is not at all clear that delinquents are less intelligent than nondelinquents.

49. Leo J. Kamin, “The Politics of IQ,” in Houts, op. cit., p. 60. This article contains a good discussion of this way of thinking.