Why Consider this Book for Your Class?

• Builds upon the first edition by describing early biological theories of crime and providing a lively, up-to-date overview of new research in biosocial criminology
• Helps students understand the new ideas and policy implications of biosocial theories and studies
• An accessible introduction to biocriminology that includes original research and analyses

“[The authors] painstakingly document the flaws of early attempts to theorize crime from a biological perspective...The Criminal Brain, Second Edition is required reading for all criminologists, biosocial or otherwise.”

—MATT DELISI, co-editer, The Routledge International Handbook of Biosocial Criminology
General Summary

What is the relationship between criminality and biology? Nineteenth-century phrenologists insisted that criminality was innate, inherent in the offender’s brain matter. While they were eventually repudiated as pseudo-scientists, today the pendulum has swung back. Both criminologists and biologists have begun to speak of a tantalizing but disturbing possibility: that criminality may be inherited as a set of genetic deficits that place one at risk to commit theft, violence, or acts of sexual deviance. But what do these new theories really assert? Are they as dangerous as their forerunners, which the Nazis and other eugenicists used to sterilize, incarcerate, and even execute thousands of supposed “born” criminals? How can we prepare for a future in which leaders may propose crime-control programs based on biology?

In this second edition of The Criminal Brain, Nicole Rafter, Chad Posick, and Michael Rocque describe early biological theories of crime and provide a lively, up-to-date overview of the newest research in biosocial criminology. New chapters introduce the theories of the latter part of the 20th century; apply and critically assess current biosocial and evolutionary theories, the developments in neuro-imaging, and recent progressions in fields such as epigenetics; and finally, provide a vision for the future of criminology and crime policy from a biosocial perspective. The book is a careful, critical examination of each research approach and conclusion. Both compiling and analyzing the body of scholarship devoted to understanding the criminal brain, this volume serves as a condensed, accessible, and contemporary exploration of biological theories of crime and their everyday relevance.
The introduction begins with a depiction of the Van Nest murder case of 1846 to highlight some of the issues associated with biological explanations of crime. Biological abnormalities were often relied on to explain offenses that seemed particularly inexplicable, or particularly monstrous. Appropriate reactions to crimes also hinged on the presumed causes. If a biological issue drove the offender, what should we do to the offender? Is he responsible? Thus, capital punishment, the insanity defense, severity of punishment, and causes of criminal behavior were at the forefront of an ever-intensifying debate surrounding biological explanations during the mid-19th century. The popularity of the biological perspective has waxed and waned throughout history; however, these issues rose again with the case of Andrea Yates, who drowned her five children in a bathtub, as she claimed she was possessed by Satan. These types of cases illustrate the importance of understanding the human brain for criminological theory. The chapter brings us to the present day as well in criminology, arguing that while biological theories have not been popular, they are starting to regain prominence. In addition to a chapter outline, the introduction also discusses the creation of the science of criminology itself.

QUESTIONS FOR DISCUSSION

- What is biocriminology?
- How does worldview influence the acceptance or rejection of a biological perspective of criminal behavior? (e.g., Conservative, Liberal, etc)
- What characteristics are often associated with biological explanations for crime? Specifically, why were the Van Nest murder and Andrea Yates cases chosen as examples for the biological perspective?
- What criminal justice issues are related to biological explanations of behavior?
SUMMARY

This chapter begins by describing the environment which led to the scientific study of crime. It focuses on the work of three individuals - Benjamin Rush, Philippe Pinel, and James Cowles Prichard - and the concept of moral insanity. Specifically, Rush, an American psychiatrist, was the first to explain crime as a natural phenomenon that could be explored scientifically, especially within the realm of psychiatry. However, it was Pinel, a French psychiatrist, who thrust the concept of moral insanity to the forefront as his work was based in factual observation and objectivity, whereas Rush at the time continued to view criminality as under the control of religion. Lastly, Prichard, an insane-asylum physician, stressed the importance of institutionalization, rather than imprisonment, for morally insane criminals. As with Pinel, Prichard suggested criminality should be under the control of psychiatry, as opposed to religion. Additionally, the chapter discusses the trajectory of the idea of moral insanity or uncontrollable criminality, as well as factors associated with appeal and resistance of the concept. Moral insanity was very popular and used as a diagnosis by physicians including Isaac Ray, who received his degree from Bowdoin College in Maine and was a superintendent of the Maine Hospital for the Insane in Augusta, Maine. Through time, the contours of moral insanity changed, becoming a heritable trait. Overall, this chapter places the origins of criminology in a framework shaped by the cultural context of the late 18th and early 19th centuries arguing that criminology was birthed from psychiatry.

QUESTIONS FOR DISCUSSION

- What role did the Enlightenment play in the development of criminology?
- What is moral insanity? How did this idea change over time?
- Early on, what factors contributed to the appeal of the concept of moral insanity?
- How does psychiatry relate to the development of scientific criminology?
- Why is it important to understand the context in which scientific criminology developed?

CLASS EXERCISE

- Discuss figures 2.1 and 2.2. What are these images depicting? What do you think about this idea that outer appearance correlates with mental state?
Chapter 3: Phrenology: The Abnormal Brain (p. 44-69)

pages 44-69

SUMMARY

Chapter 3 discusses phrenology and its role in criminology. Phrenology is the practice of reading personality from the contours of the skull. Phrenologists are credited with the development of the first comprehensive explanation of criminal behavior; minor crimes to the most horrific crimes could be explained by brain defects. Phrenology attempted to replace theological explanations of criminal behavior with empirical science. The chapter further explains the context in which phrenology developed, similar to that of moral insanity theory, referencing the enlightenment, as well as physiognomy and craniology. Several typologies have been developed by phrenologists such as Gall, Spurzheim, Combe, and Simpson to explain criminal behavior. For example, Spurzheim’s organology included Destructiveness, Amativeness, Combativeness, Covetiveness, and Secretiveness. These organs, when overdeveloped, lead to criminal behavior. The chapter follows with discussion of phrenology in terms of criminal law and punishment. The development of phrenology occurred during a transitional period where ideals of retribution and deterrence were being challenged by reformation. Capital punishment was challenged, and rehabilitation became the cornerstone of prison reform during the 19th century. Despite its initial popularity, by the mid-1800s phrenology was on the decline as professionals and intellectuals began to realize that basically any evidence could be used as support for such a diverse theory. Lastly, the chapter ends with a discussion of phrenology today, specifically as biocriminology. Despite its obvious shortcomings, phrenology is still credited as being the first comprehensive scientific explanation of criminality.

QUESTIONS FOR DISCUSSION

- What is phrenology? What are some of the theory’s basic assumptions?
- How are social and political hierarchies related to phrenology?
- Why did phrenology lead to a shift in thinking about criminal sanctions from retribution to rehabilitation?
- How does our prison system today compare with the phrenologists’ views of a well-ordered prison during the 19th century?

CLASS EXERCISE

  - Capital punishment is discussed in Chapter 3 in light of phrenology. What do you think about the prosecutor’s decision to seek the death penalty?
Chapter 4: Criminal Anthropology: The Atavistic Brain
pages 70-95

SUMMARY

The chapter discusses criminal anthropology, and its founder Cesare Lombroso. It begins with a brief summary of Lombroso's life, including his study of medicine, work as a professor, and his writing of Criminal Man (1876). Lombroso outlines his doctrine through five editions of Criminal Man, explaining the criminal (atavist) through characteristics of body, skull, and brain. Specifically, he argued that criminals had small or malformed skulls, large jaws, receding foreheads, defective intellect, moral blindness, and so on. In addition to the male criminal typology, Lombroso wrote the first book on female criminals, arguing that among female criminals, the prostitute is the true-born criminal. Fundamental ideas of Lombroso's criminal anthropology are based in scientific racism, which implemented techniques constructed from anthropology, phrenology, and other perspectives to create a hierarchy of human races. Ultimately, the basis of scientific racism (the white man and the man of color) proved to be nothing more than white superiority. The chapter further discusses Lombroso's ideas on the causes of crime, criminal anthropology as a science, and its relation to criminal justice, as well as the role Lombroso and his worked played in the development of criminology as it is known today.

QUESTIONS FOR DISCUSSION

- What is criminal anthropology?
- What role did racism play in Lombroso’s criminal typology?
- What was the cause of crime, according to Lombroso?
- Compare classical and positivist criminology. Where does criminal anthropology fall in these categories?

CLASS EXERCISE

• Examine and discuss figure 4.3. What do you think about the comparison of human and animal skulls to determine criminality?
SUMMARY

Chapter 5 discusses 19th-century criminology in terms of evolutionary thought and its influence on criminology as we know it today. The chapter begins with an introduction to evolutionism (all natural explanations of organic development), and follows with two major themes within evolutionist thought during the 19th-century: evolution as species development - including natural, social, and individual evolution, as well as evolution as inheritance. The primary focus of evolution as species development pertains to Charles Darwin and his works Origin of Species and The Descent of Man, whereas evolution as inheritance is closely associated with Benedict Morel and degeneration theory. Further, the chapter discusses the impact of evolutionism on criminology through the perspective of four individuals - Henry Maudsley, Richard Dugdale, Cesare Lombroso, and Richard von Krafft-Ebing. Maudsley was a psychiatrist who viewed criminality as a form of insanity. He argued that there was a distinct criminal class, and these individuals were degenerates with no hope of reform. Dugdale, a businessman, implemented a research design to scientifically prove that criminality was hereditary through genealogical research known as the study of the “Jukes.” Lombroso, also a psychiatrist, was known for his theory of atavism and his uniqueness in his delineation of the criminal man. Lastly, Krafft-Ebing, another important individual in psychiatry, was also a degenerationist who applied those ideas to sexual deviance. He believed that sexual offenses indicated degeneration, or backward evolution. The chapter ends with a discussion of Galton and how his work led to changes in criminological thought, specifically the idea of nature versus nurture and genetic criminology; as well as an explanation of how 19th-century evolutionism paved the way for modern genetic criminology and biosocial theories.

QUESTIONS FOR DISCUSSION

- How did evolutionary ideas and theories change 19th-century thinking about creation?
- What impact did Darwin’s work have on criminology?
- What is social Darwinism? How does this relate to criminal behavior?
- How did 19th-century evolutionary theories shape today’s fields of genetic and biosocial criminology?

CLASS EXERCISES

- Examine and discuss figure 5.1. What do you think about the process of evolution from a Mongolian to European and to the “ideal” as shown by the statute of Apollo? How were these ideas grounded in cultural ideas of the 19th-century?
What role did scientific racism play in evolutionary ideas at this time?
• What does an evolutionary perspective on criminal behavior imply about how the criminal justice system should respond to such behavior?
SUMMARY

Chapter 6 focuses on the feeblemindedness theory of deviance, namely eugenics. The most widely known example of a Supreme Court ruling in favor of eugenics is Buck v. Bell, in which Carrie Buck was sterilized against her will for “crime control” purposes as she was deemed an “imbecile.” This theory was the first genetic theory of crime, as well as the first influential theory developed primarily in the United States. At its peak, this theory was used to justify locking up and sterilizing large portions of the population under the guise of feeblemindedness which, they argued, led to criminal behavior. Charles Goring, a prison physician, unintentionally lent support for criminal anthropology in his book The English Convict, in which he found that English prisoners have different physical and mental characteristics as compared to the general population. His findings integrated evolutionist theory and feeblemindedness theory, highlighting odd physical features and lower levels of intelligence as compared to the general population. Goring also argued that the only solution to crime was eugenic procedures. To further this cause, Henry Goddard conducted a study on the Kallikak family, which ultimately offered evidence for the heredity, or inheritance of feeblemindedness. Additionally, Goddard translated Alfred Binet’s intelligence exams, which he used to test criminals and determine their feeblemindedness. In addition to the brief history of feeblemindedness theory and eugenics, the chapter continues with a discussion of social class and social control, antimodernism, the decline of eugenic criminology, and lessons learned from the history of eugenics. Specifically, the chapter highlights the importance of feeblemindedness theory not only for crime control, but also for social class control. The eugenics movement not only targeted criminals, but also anyone deemed “unfit,” such as anarchists, immigrants from certain areas, and individuals with mental illness. This movement was supported by not only the elite class, but also Progressives. Ultimately, however, by the 1920s, improvements in intelligence testing began to sow the seeds of doubt for many supporters of the eugenics movement. The lesson learned from the history of stupidity theories is to be critical of science.

QUESTIONS FOR DISCUSSION

➡️ What types of theories can be considered stupidity theories?

➡️ How did eugenic criminologists intend to control crime?

➡️ How did evolutionist theories provide a base for which eugenic criminology was built upon?

➡️ What issues could or did arise because of the vagueness of the term “feebleminded?”

➡️ What is antimodernism, and how does it relate to eugenics?
What led to the decline of eugenic criminology?

CLASS EXERCISES

- Examine and discuss figure 6.2. What does this represent? What would have happened if government intervened and sterilized some of these individuals against their will? What do you think about eugenic procedures, such as sterilization?

- Examine and discuss figure 6.3. What do you think of these questions? Do you think, based on these questions, you would be considered feebleminded?
SUMMARY

Chapter 7 focuses on constitutional theory, discussing its history, as well as evaluating its theoretical basis. First, the chapter summarizes the origins of bodytype research, tracing its beginnings to Ernst Kretschmer, a German psychiatrist. Kretschmer associated certain body types with mental disease. However, the development of constitutional theory is most closely associated with Earnest Hooton and William Sheldon. The chapter describes the biographies of both Hooton and Sheldon to highlight how they came to view eugenics and antimodernism as they relate to crime. Hooton’s third phase of research focused on associating certain body types with different personality traits. He is most widely recognized for his Criminals Study, including The American Criminal, in which he concluded that criminals were inferior to the general population according to their body measurements. Moreover, from Crime and the Man, Hooton concluded that criminals are inferior with no hope for reform. His influence on later bodytype researchers greatly influence constitutional theory. Sheldon, on the other hand, is known for his work in constitutional psychology, as he published four books on the physical determinants of personality. He developed typologies for body types, as well as biologically-determined attitudes. Ultimately, he concluded that criminal behavior was a result of inherited inferiority. The chapter continues with a description of Sheldon as an antimodernist describing his opposition to modern life. Further, the discussion shifts to the Gluecks, and Sampson and Laub, who conclude that social factors may intervene to explain the connection between mesomorphy, or body type, and delinquency. The chapter closes by addressing the future of constitutional theory, stating that it has some connection to today’s genetic criminology; however, it has several limitations in regards to the assumption that body type is static, and that it is known that the majority of crime is committed by young males. Again, we must be critical of science.

QUESTIONS FOR DISCUSSION

- What is constitutional theory? What types of theories does this umbrella term encompass?
- How did evolutionist theories lay the groundwork for constitutional theories?
- How do modernism and antimodernism aid in explaining 20th-century constitutional theories as compared to today’s genetic criminology?
- What impact did the Gluecks’ and Sampson and Laub’s conclusions about constitutional theory have on its trajectory
CLASS EXERCISES

• Examine and discuss figure 7.3. Can you think of any limitations of such a typology? What social factors could influence body type?

• Examine figure 7.5. The caption states “control the progress of evolution by breeding better types and by the ruthless elimination of inferior types.” What do you think of this statement?
Chapter 8: Criminology’s Darkest Hour: Biocriminology in Nazi Germany
pages 190-214

SUMMARY

Chapter 8 explores the history of criminal biology during the Nazi era in Germany. Referred to as criminology’s darkest hour, the chapter begins by providing the social context which led to eugenic policies and actions implemented by the Nazi state supported by criminal biology of the time. Specifically, during the Weimar reign, criminology was considered part of the medical field in which most criminologists were physicians and psychiatrists. Criminality was seen as an inheritable biological condition, and criminals were labeled as incurable. Criminal biology during the Third Reich incorporated eugenics and racial hygiene perspectives. This form of Aryan or biological criminology during the Nazi Era changed criminal justice in several ways. First, the Sterilization Law authorized sterilization of individuals ranging from alcoholics to those deemed “feebleminded.” Such a broad term led to the forcible sterilization of practically anyone Hitler deemed unfit. Moreover, policing became militarized and courts and prisons became tools of Nazi control as indefinite sentences were handed down and people hauled off to concentration camps, often for nothing more than being deemed “asocial.” The chapter then offers a comparison between German and Italian fascism and dictatorship. Criminology was also deeply influenced by Lombroso in Italy, as in Germany; however, Italian criminologists incorporated sociological ideas that buffered against the extremism in Nazi Germany of biological determinism. Additionally, though Mussolini embraced some eugenics policies, religion in Italy protected against sterilization programs. Similarly, though, racism did occur in Italy, as in Nazi Germany, and southern Italians were deemed inferior and criminalistic. Ultimately, the impact of criminal anthropology played out differently in Italy and Nazi Germany: sociological influences led to more liberal and less racist directions for Italy, and anti-Semitism was not as ingrained in Italy as in Nazi Germany.

QUESTIONS FOR DISCUSSION

- How did Lombroso’s work influence Nazi Germany criminology?
- What influences during the Weimar period led to the development of Nazi criminal biology?
- Explain the difference between eugenics and racial hygiene during the Third Reich.
- How did biocriminology influence Nazi Germany criminal justice policies?
- How did Lombrosian ideas and criminal anthropology play out differently in Italy and Nazi Germany?
CLASS EXERCISE

• In the introduction, the author states “The new interpretation of Nazi science holds that the enlistment of science in a vast and disastrous enterprise such as occurred in Hitler’s Germany could happen again” (p.191). Discuss the differences in the old and new interpretations of Nazi science. Do you think the events in Nazi Germany could happen here in the United States? Consider and discuss the recent comparisons of Donald Trump to dictators such as Hitler and Mussolini (http://www.businessinsider.com/r-hp-ceo-whitman-comparres-trump-to-hitler-mussolini-2016-6)
SUMMARY

This chapter, as well as chapters 10 and 11, outlines the process through which sociological and biological theories merged into biosocial criminology. Specifically, chapter 9 focuses on the mid to late 20th century and describes the causes of criminal behavior according to biological theorists of the time. First, the chapter discusses acquired biological abnormalities, such as lead poisoning or traumatization and their links to criminal behavior. These studies link the environment directly to biology with respect to the genesis of crime. Next, 20th century biological theorists who associated cognitive deficits with crime are discussed. For example, in *Crime and Personality* Hans Eysenck (1964) argued that individuals who suffer from poor genetics struggle with learning moral behavior. Richard Herrnstein and Charles Murray's 1996 *The Bell Curve* suggested that criminals’ IQ scores are lower than that of the general population. The chapter goes on to discuss evolutionary theories of crime, as well as neuroscientific and genetic explanations of crime as suggested causes of criminal behavior according to 20th century biological theorists. Important to genetic research, the focus has shifted from a nature versus nurture dichotomy to a model of interactivity today, such as nature via nurture. Finally, the chapter closes with a summary of biosocial research of the late 20th century, and notes that one of the most significant contributions of such research is that despite a genetic component to criminal behavior, no one is destined to be a criminal. Biosocial criminology experienced much growth and a surge of interest during a period of focus on preventing harm and decreasing risk; yet at the end of the 20th century, biological and sociological theorists were still far from letting go of their prejudices.

QUESTIONS FOR DISCUSSION

- What contributed to the resurfacing of biological theorizing during the mid to late 20th century?
- How did *Crime and Personality*, as well as *The Bell Curve* impact biological explanations of crime?
- Why is it important to discuss criminology's shift to a preventative state and a focus on actuarial justice? What does this have to do with biosocial criminology?

CLASS EXERCISE

- Examine figure 9.1 and discuss. What do you think about Whitman’s actions knowing of his brain tumor and experience of abuse as a child? Do you think about abnormalities, such as tumors, in terms of criminal behavior?
SUMMARY

Chapter 10 reviews some of the major findings in biosocial criminology, identifies some of its subfields, and highlights the strengths and weaknesses of the emergent biosocial theories of the 21st century. The chapter begins with a discussion of evolutionary criminology, highlighting its importance for many theories today; for example, control theories and the assumption that humans are selfish and aggressive by nature. Other evolutionary ideas, such as assortative mating, affect the trajectory of criminological theories. The next section focuses on empathy, highlighting the importance of recognizing that the neurological and social influences in the development of empathy are practically indiscernible. Research such as this has persisted since the 19th century and studies of the link between crime and the brain continue. Some researchers conclude that the function and structure of criminals’ brains differ than those of law-abiding individuals; however, they seem to focus on chronic offenders. Newer technologies such as CT, MRI, PET and fMRI have increased knowledge about the brain in ways that have impacted criminal justice policies. The remainder of the chapter discusses neurochemistry, endocrinology, physiology, and epigenetics in terms of the impact of biology on behavior. The question then becomes if it is biology that influences behavior, how do we address such behavior, and what are appropriate criminal justice responses? One important example is the impact of research on brain development, which led to the ban on the death penalty for individuals under 18, as well as individuals with certain mental defects or deficiencies. Biosocial criminology offers new approaches to crime prevention and rehabilitation; however, we must not forget the past. It is important to remember that “nature works via nurture.”

QUESTIONS FOR DISCUSSION

• What is assortative mating and how does it relate to criminology?

• Why is it important to recognize that in the development of empathy, social and neurological influences are nearly indistinguishable?

• How has neuroscience influenced criminal justice policy?

• What types of policies for crime prevention and rehabilitation do biosocial theories offer?

CLASS EXERCISES

• Research shows that high levels of testosterone are related to aggression and violent behavior, as discussed in the section on neurochemistry and endocrinology. How can we use this information for criminal justice policy? What are some
potential issues?

- Jill Portnoy’s study of adolescents’ resting heart rate suggests that a low resting heart rate is related to nonviolent as well as violent delinquent behavior. Is there a possible extraneous variable or spurious relationship between low resting heart rate and delinquency?
Chapter 11: The Future of Biosocial Criminology

SUMMARY

The final chapter discusses the future of biosocial criminology. The first section makes the case for why biosocial work needs sociology and social science, highlighting four factors: disciplinary boundaries, lack of training, narrowness of focus, and moral and political implications. First, it is important to recognize the limitations of each discipline; for example, research that pits biological and environmental factors against one another overlook the ways in which the influence of biological factors is contingent on certain types of environments. Next, the issue of the lack of training is present in several spheres as often criminologists are not trained in biology, but biosocial criminologists may possibly not have been exposed to central works on the effects of poverty, racial discrimination, and similar social forces. There is a huge range of social factors that influence criminal behavior and that is why biological researchers needs training in social science research. Further, it is important to avoid tunnel vision - biological researchers often fail to recognize the importance of social context on criminal behavior. Lastly, the authors argue that biocriminological work needs sociology because of past implications of some biological findings. Science cannot and is not value-free and completely objective. In closing, the chapter suggests biological and sociological theorists can work together using two approaches: statistical interactions and mediation. Biosocial criminology can tests and usefully modify many traditional theories, such as self-control and development/life course theories. The fusion of biological and sociological approaches serves as protection from undesirable implications of the past and as the future of criminology.

QUESTIONS FOR DISCUSSION

- What do the cases of Victor and Genie suggest about nature and nurture?
- One section discusses the lack of training for criminologists in biological sciences. Do you think this training is necessary? If so, how should it be addressed?
- Other than the four factors discussed, can you think of any further reasons to merge biological and sociological work?

CLASS EXERCISE

- Examine and discuss figure 11.1. What is this image attempting to convey about violence?