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## **BOOK REVIEW**

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## Review of: *Classics in Environmental Criminology*

REFERENCE: Andresen MA, Brantingham PJ, Kinney JB, editors. Classics in environmental criminology. Boca Raton, FL: CRC Press, 2010, Published with Simon Fraser University Publications, 535 pp, ISBN 978-1-4398-1779-7.

This is not a book most forensic scientists would select for casual reading as it addresses the ecology of crime, or environmental criminology. There is a connection to forensic science, however, which may be of particular interest to the readers of JFS that I will explain below. The text is an anthology of historical and contemporary articles compiled by three scholars at Simon Fraser University School of Criminology. The authors selected some of the most important original articles that influenced the growth of the criminological literature for the anthology. It addresses environmental factors that play a role in explaining how and where crime occurs, including characteristics of communities that predict crime, as well as the decision-making patterns of offenders. It also presents contemporary literature that addresses how the environment can be altered to prevent and reduce opportunities for crime which is an area where criminology is headed in the future. The text is divided into three sections: the first shows the reader how spatial criminology evolved in its early years, the second demonstrates the shift in environmental criminology from the sociological to the geographical, and the third addresses crime prevention from an environmental criminologist's perspective.

The origins of environmental criminology actually began in the 1800s in a field of study known as spatial criminology. One of the early pioneers in spatial criminology was Adolphe Quetelet and his work on "A Treatise on Man and the Development of His Faculties" taken from his "Of the Development of the Propensity to Crime" (1842) is included in this review. Considering when it was published, the quantity and sophistication of numerical data in Quetelet's treatise is astounding as he examines the association between age, education, profession, gender, etc. and personal and property crime throughout areas of France. Quetelet, trained as a mathematician and astronomer, is sometimes credited with introducing statistics to the field of social science and was one of the originators of the positivist school of criminology that tried to identify various positive social causes of crime. He also developed the Ouetelet or Body Mass Index that is defined as an individual's body weight divided by the square of his or her height. It was his work on anthropometry that served as the connection to the work of Alphonse Bertillon and forensic science.

Quetelet recognized the uniqueness of the human body and his work encouraged a young Parisian police clerk, Alphonse Bertillon, to develop a system of criminal identification based on the premise

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that no two persons' physical measurements were exactly alike. Bertillon's father, a physician and statistician, was reported to be a colleague of Quetelet's. The Bertillon system of physical measurements, photography, and record keeping was adopted by the Paris police in 1883 and became known as "Bertillonage." While adopted worldwide by many police and corrections agencies in the late 1800s, it soon became apparent Bertillonage was unwieldy and subject to error. The value of recording the uniqueness of offenders, however, was recognized by many and inspired Galton and others to develop fingerprints as a superior technique to identify offenders and link them to scenes of crimes. And, of course, the concept of human individuality became a key forensic science concept and has advanced to such other breakthroughs as DNA typing.

Returning now to the Andresen text, the readings move from a treatment of crime and delinquency in the communities and residences where offenders live as the scale of analysis becomes finer and statistical analysis more sophisticated. While crime policy proposals generally focus on the sociological problems of neighborhoods that lead to crime, environmental criminologists focus on the activities of individuals and how those persons move through their surroundings. In Part II, articles address "routine activity theory" and how changing the daily activities of individuals can affect the crime rate. The post World War II increase in crime can in part be explained by the increase in opportunities for criminal victimization, including such things as the increased mobility of offenders and victims, more women in the workforce, and the increase in high-value, portable goods. Research has advanced on understanding why offenders choose to commit crimes in particular areas and along certain pathways, and how various social controls can affect the ultimate choices of individuals. Part III reintroduces the prevention of crime, the different forms it may take, and the important work by C. Ray Jeffery addressing crime prevention through environmental design. Some authors argued for simple models that reduced opportunities and increased risk for criminal activities, while still others argued that offenders make rational choices when choosing among alternative courses of criminal conduct. Other authors stressed dynamic factors that continually change our routine activities, that modify crime patterns, that must in turn be met by improvements in crime prevention methods.

While this is clearly a criminological and not a forensic science text, both fields do share common characteristics. First, some criminologists focus on the physical environment in explaining the origins of crime and, for forensic scientists, the environment provides valuable clues to reconstruct crime and to link the offender (after the fact) to the crime scene. Second, both fields have progressively become more sophisticated in their use of measures and statistical techniques. For environmental criminologists and forensic scientists, they actually share a common origin in the 1800s with the early

research by Quetelet and Bertillon that was based upon statistical measures and the concept of individuality. For the forensic sciences, the importance of demonstrating the individuality of evidence using statistical data leads us to the present day call for better, more reliable data, to support conclusions of individuality formed by forensic examiners.