

Review

***Genetics, Crime and Justice* by Debra Wilson,
Edward Elgar Publishing, 2015, 272 pp (ISBN 9781783478811)**

Allan McCay*

Introduction

Debra Wilson's *Genetics, Crime and Justice* is a useful contribution to a topic that confronts criminal justice systems in many jurisdictions: the issue of how to respond to developments in genetics. The book considers the process of criminal investigation with reference to DNA databases, trial and sentencing in relation to biological understandings of human behaviour, and questions of genetic screening and eugenics. Wilson's concerns go beyond science and law to include ethics and wider social issues.

Other scholars have written about the criminal law's response to behavioural genetics in a number of jurisdictions (see, for example, Farisco and Petrini 2012; Farahany 2016), but Wilson's book is unique insofar as it is the only currently available law book that solely focuses on genetics and criminal justice. It is also unique in its comprehensive treatment of the issues for criminal justice derived from the science of genetics.

A cautionary history: Ethics, genetics and crime

The book's genetic approach to crime may bring to mind the biocriminology advanced by the 19th-century Italian criminologist Cesare Lombroso. Lombroso's approach forms an early part of the positivist school of criminology, which venerates the scientific method and inquires into the causes of crime, while at the same time calling into question the free will of offenders. Aspects of Wilson's work shares concerns similar to the positivist tradition, as she considers the contemporary science of behavioural genetics to generate questions about free will (p 167). Wilson does not reject the notion of free will, but her free will discussion is not the most rigorous section of the book. She does not argue for a radical transformation of the criminal justice system as a result of contemporary biological understandings of the causes of criminal behaviour (p 185).

Mindful of criminology's subsequent repudiation of Lombroso's biological positivism, epistemic caution is warranted when examining the new genetic knowledge of crime discussed in Wilson's book. Ethical caution is also warranted. A more recent period in the history of criminology seems salient when considering *Genetics, Crime and Justice*. Nicole Rafter has, with much justification, referred to the period in which the Nazi party pursued its biocriminological policies as 'criminology's darkest hour' (Rafter 2008:176). Rafter's historical reflection underscores the ethical importance of considering the direction that

* Lecturer, Sydney Law School, University of Sydney NSW 2006 Australia; Affiliate Member, Centre for Agency, Values and Ethics, Macquarie University. Email: amcc4688@uni.sydney.edu.au.

criminal justice might take in response to contemporary developments in biological knowledge.

Nazi biocriminology now seems distant, but it is not surprising that biological approaches to crime were somewhat marginalised after World War II. Wilson's book forms part of a larger resurgence of interest in the biological causes of behaviour, and the book might be viewed as a contribution to a research program that has risen to prominence in the 21st century: *neurolaw*.

Neurolaw looks at the role that neuroscience plays in the law. Why might Wilson's work on genetics be considered a contribution to that field? It is worth asking this as she does not describe her work using that term. In *Genetics, Crime and Justice*, Wilson discusses research into the effects of genetic predisposition to a lower than usual level of activity of a brain enzyme known as Monoamine Oxidase A ('MAOA'). She notes that some research suggests that males who have low levels of MAOA activity, and who are also subject to maltreatment, are at higher risk of antisocial behaviour (p 87). In discussing how brain chemistry affects criminal conduct, and how the criminal law responds to this knowledge, Wilson finds herself in territory claimed by *neurolaw*.

A further point that should be emphasised in connection with Wilson's discussion of MAOA is her focus on interaction between genes and the social environment. Thus, the view of human behaviour discussed in the book is not one of genetic determinism, but one in which both nature and nurture have a role in shaping criminal conduct (p 106).

Mapping genetics, crime and justice

The comprehensive nature of the book is both a strength and weakness. It does a very good job of mapping the territory, and outlining a very extensive range of issues relating to criminal justice, all the way from investigation to the courts. In this sense, it is a very ambitious book. It ranges across several jurisdictions, including the United States, Australia, New Zealand and the United Kingdom. Wilson's book also reaches beyond the law into social issues and philosophical problems.

An advantage of this broad scope is that it provides a bird's-eye view of a range of connected topics in a way no other work manages. The usefulness of this feature of the book should not be understated. However, a disadvantage is that, by necessity, the topics covered can only be sketched, rather than fully developed. Generally, the book aims to explain complex scientific issues and the legal and ethical issues they generate, rather than to strongly argue for a particular thesis. That said, Wilson does take a position on some issues she discusses (as has already been mentioned in connection with claims about the revolutionary power of behavioural genetics). Because of the brevity of the treatment the reader is at times left feeling more work needed to be done to advance particular arguments.

After beginning with a historical survey of ideas about biology and crime, Wilson considers the responses of justice systems in matters of criminal law, eugenics, and the establishment of DNA databases. She presents an excellent overview of contemporary research into MAOA and other genetic links to crime that is sensitive to methodological issues in studying the way that genes interact with social environments to raise the probability of criminal conduct (p 92).

Wilson considers the use of behavioural genetics at various stages of the criminal process in contemporary cases. A significant portion of her useful discussion focuses on MAOA in

the context of sentencing. Note that she does not discuss any Australian MAOA cases. This is not an omission — Australian courts have not had reason to address the issue of MAOA and crime at trial or sentencing and little has been written on the topic. There does not seem to be a legal impediment to use of evidence derived from behavioural genetics in at least a sentencing matter in Australia (McCay 2012), and it would be interesting to consider whether Australian expert witnesses have a different attitude to this kind of evidence from their counterparts overseas. Wilson also considers ethical issues, such as the implications of behavioural genetics for the different aims of punishment, and the question of whether the state should screen newborn children to ascertain their MAOA status.

For a reader who is new to the area, *Genetics, Crime and Justice* provides a useful overview of the legal, ethical and social issues pertaining to the broad area encapsulated by the book. The reader who is familiar with some sections of the book's scope will likely gain something of interest from the other connected topics Wilson considers. There is significant merit in such a work — one that brings together this diverse but thematically connected body of knowledge.

References

- Farahany NA (2016) 'Neuroscience and Behavioral Genetics in US Criminal Law: An Empirical Analysis', *Journal of Law and the Biosciences* 3(2), 485–509
- Farisco M and Petrini C (2012) 'The Impact of Neuroscience and Genetics on the Law: A Recent Italian Case', *Neuroethics* 5(3), 317–19
- McCay A (2012) 'The Fernando Principles and Genetic Vulnerabilities to the Criminogenic Effects of Social Environments', *Indigenous Law Bulletin* 8(6), 9–13
- Rafter N (2008) *The Criminal Brain: Understanding Biological Theories of Crime*, New York University Press