**Book Reviews**

Sofia Moratti and Dennis Patterson (eds.)


1 Introduction

The historical controversy between philosophical notions of free will and deterministic views of human behaviour is currently at the centre of a complex debate that may have widespread implications for criminal law. Fuelling this debate is the emerging field of neuroscience, which, beginning in the 1990s, started to revolutionise our understanding of the workings of the brain and question the notion of human agency upon which modern legal systems are built. Neuroscientific research has shown that lesions to particular parts of the brain may impair individuals’ ability to control their impulses and adapt their behaviour to legal requirements. Given neuroscientists’ ability to identify said lesions through novel brain imaging techniques, this discovery has stimulated lively discussions regarding the possible contribution of neuroscience to assessments of criminal responsibility in Western courts.

*Legal Insanity and the Brain* provides a sample of the debate sparked by these scientific developments, situating it in the legal context of selected European countries and in the United States. The book examines the regulation of legal insanity and criminal responsibility in detail, and points to recent legislative attempts to modernise out-dated standards to reflect contemporary scientific advancements. It specifically explores the influence of neuroscience on these debates and the use of neuroimaging evidence in criminal cases. Given the book’s interdisciplinary scope, the review will only briefly address the general development of legal insanity standards, and focus instead on the ways in which contributors have explored the impact of neuroscience on criminal proceedings in specific jurisdictions.
2 Overview

The volume is structured as a collection of essays and is divided into nine chapters. The introduction, authored by Sofia Moratti and Dennis Patterson, provides a clear overview of the themes to be discussed in the collection. Chapter 2 provides the scientific background and foundation for subsequent chapters. Chapters 3 through 9 emphasise the neurolaw debate and situate the conversation in Belgium, France, Italy, the Netherlands, Sweden, the United Kingdom, and the United States.

Chapter 2, ‘The Neurobiology of Antisocial and Amoral Behaviour: Insights from Brain Science and Implications for Law’, by Cole Korponay and Michael Koenigs, offers a detailed discussion of the current status of neuroscientific research and brain-imaging technologies. In a language accessible to a lay audience, the essay provides a clear explanation of the neuronal networks of the brain and their correlation with behavioural dysfunctions that have been linked to criminal behaviour. Drawing from growing scientific evidence showing the association of frontal lobe damage and anti-social behaviour, the chapter proposes that neuroimaging techniques can strongly contribute to the adjudication of responsibility in criminal proceedings. However, it carefully highlights the limits of the new technology for the interpretation of real-life situations, providing a balanced assessment that may guide courts charged with examining neurobiological evidence in individual cases.

Chapter 3, ‘Neuroscepticism in the Courtroom: The Limited Role of Neuroscientific Evidence in Belgian Criminal Proceedings’, by Katrien Hanouille and Frank Verbruggen, discusses the insanity defence and internment measure for public protection in Belgium. The analysis centres primarily on issues related to the internment measure, on parliamentary challenges leading to its reformation in 2014, and on the inadequate psychiatric treatment offered to internees. Conversely, the debate on neuroscience is only briefly addressed, partially due to Belgian courts’ scepticism regarding neuroscientific discoveries and brain-imaging techniques. As Hanouille and Verbruggen explain, neuroimaging evidence is rarely if ever presented in Belgian courts, and the few psychiatrists taking a position on the matter tend to assign it limited importance due to its dubious reliability. The scholars share this cautious approach, arguing that to avoid the illusion of scientific infallibility and biological determinism, brain scans should only be introduced in court to complement traditional psychiatric evidence.

In Chapter 4, ‘France. Is the Evidence Too Cerebral to be Cartesian?’, Rafael Encinas de Muñagorri and Claire Saas discuss the historical development of legal insanity and criminal responsibility in France, and the reception of...