

THE ROLE OF FOLK BELIEFS ABOUT FREE WILL IN SENTENCING: A NEW TARGET FOR THE NEURO-DETERMINIST CRITICS OF CRIMINAL LAW

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Do recent results in neuroscience and psychology, that portray our choices as predetermined, threaten to undermine the assumptions about “free will” that drive criminal law? This Article answers in the affirmative, and offers a novel argument for the transformative import of modern science. It also explains why a revision in the law’s assumptions is morally desirable. Problematic assumptions about free will have a role to play in criminal law not because they underlie substantive legal doctrine or retributive theory, but because everyday actors in the sentencing process are authorized to make irreducibly moral determinations outside of the ordinary doctrinal framework. Jurors, judges, and legislators are each required, at key points in the sentencing process, to make moral judgments that cannot be reached without reference to the person’s own understanding of free will. As a result, sentencing actors give legal effect to widely-held folk beliefs about free will, beliefs that the evidence suggests are both scientifically suspect and morally distorting. The relevant beliefs make adjudicators less likely to attend to the underlying causes of crime, such as social deprivation – a tendency that biases adjudicators against relevant arguments for mitigation in sentencing. Modern science could have an important corrective effect in this context.

Key words: Free Will, Criminal Responsibility, Determinism, Neuroscience, Mitigation

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INTRODUCTION

Advances in neuroscience, behavioral psychology, and genetics have led to a number of important discoveries about brain function and human behavior. These discoveries portray human decision making as a thoroughly natural and deterministic process, involving complex interactions between electrical impulses in the brain governed by the laws of physics. Many believe that the modern scientific understanding of why individuals choose the way they do debunks the widely-held assumption that human behavior is caused by an internal faculty in agents called “free will.”¹ This line of reasoning is especially troubling for those who think that American criminal law presupposes the existence of free will and that the law’s moral legitimacy depends on the reasonableness of its assumptions about human behavior.

On a fairly common view, American criminal law treats individuals, generally, as rational actors capable of “voluntary control” – if the law’s way of regarding those who are subject to its demands reflects an outdated commitment to the existence of free will, then the criminal justice system faces a real challenge. Scientists skeptical of free will have already begun critiquing legal doctrines and theories of punishment that they perceive as founded on faulty assumptions about human behavior.² Their provocative claims have fueled heated academic debate over the

¹ See, e.g., Joshua Greene & Jonathan Cohen, *For the Law, Neuroscience Changes Nothing and Everything*, 359 PHIL. TRANSACTIONS ROYAL SOC’Y BIOLOGICAL SCI. 1776, 1777 (2004) (“[T]here is not a shred of scientific evidence to support the existence of [free will] . . . any scientifically respectable discussion of free will requires the rejection of . . . the panicky metaphysics of libertarianism.”); David Eagleman, *The Brain on Trial*, ATLANTIC MONTHLY (Jul. 2011), <http://www.theatlantic.com/magazine/archive/2011/07/the-brain-on-trial/8520/> (arguing that neuroscience is making it seem increasingly unlikely that we have free will); Tim Bayne, *Libet and The Case for Free Will Skepticism*, in FREE WILL AND MODERN SCIENCE (Richard Swinburne ed., 2012) (observing that many take Benjamin Libet’s psychological studies to support skepticism about free will).

² See, e.g., Joshua Greene & Jonathan Cohen, *supra* note 1, at 1778 (observing that neuroscience will radically transform criminal law by undermining belief in free will); David Eagleman, *Neuroscience and the Law*, 16 HOUS. LAW. 36, 37 (2008). See also Luis E. Chiesa, *Punishing without Free Will*, UTAH L. REV. (forthcoming 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1804468; Antoine Bechara and Kelly Burns, *Decision Making and Free Will: A Neuroscience Perspective*, 25 BEHAV. SCI. & LAW. 263, 263 (2007) (“[T]he idea of freedom of will on which our legal system is based is not supported by the neuroscience of decision

relationship between modern science and the law's conception of the criminal actor.³ Meanwhile, defense lawyers have begun using state-of-the-art neuroscience to challenge the volitional capacities and criminal responsibility of defendants⁴; what were once issues confined to purely academic debate have become central to recently litigated cases.

This Article offers a novel take on whether modern science threatens to undermine and supplant the criminal law's assumptions about human behavior. It argues that the science will live up to its radical promise but in a way that commentators on both sides of the issue have missed. The academic debate has already gone through a round of argument and counter-argument, with scholars focusing exclusively on the "legal" concept of free will and its relationship to deterministic science. For instance, commentators have carefully investigated what it means for a criminal to act "freely" in the sense required by such criminal law doctrines as the "voluntary act" requirement and whether the possibility of "free action" in this technical,

making."); Stephen O'Hanlon, *Towards a More Reasonable Approach to Free Will in Criminal Law*, 7 CARDOZO PUB. LAW POL'Y & ETHICS J. 395, 395-96 (2009) (arguing that the "strong presumption of free will" underlying theoretical justifications for punishment is called into question by the fields of genetics and neuroscience); Matthew Jones, *Overcoming the Myth of Free Will in Criminal Law: The True Impact of the Genetics Revolution*, 52 DUKE L. J. 1031 (2003) (arguing that theoretical justifications for criminal punishment assume the existence of free will, in a way that is undermined by genetics). Amanda C. Pustilnik observes that "[s]ince 2000 alone, over 200 articles have appeared in law reviews on the subject of criminal law and neuroscience." *Violence on the Brain: A Critique of Neuroscience in Criminal Law*, 44 WAKE FOREST L. REV. 183, 186 n.10 (2009). For media coverage of the debate, see, for example, Editorial, *Free to Choose? Modern Neuroscience Is Eroding the Idea of Free Will*, ECONOMIST, Dec. 19, 2006.

³ See, e.g., Stephen Morse, *Genetics and Criminal Responsibility*, 15 TRENDS IN COGNITIVE SCI. 378, 379 (2011) (denying that modern neuroscience and genetics will have any transformative effect on criminal law); Stephen Morse, *Lost in Translation?: An Essay on Law and Neuroscience*, in LAW AND NEUROSCIENCE, 13 CURRENT LEGAL ISSUES 529 (Michael Freeman ed., 2011) [hereinafter Morse, *Lost in Translation*] (critiquing the reformist position generally); Stephen J. Morse, *Determinism and the Death of Folk Psychology: Two Challenges to Responsibility from Neuroscience*, 9 MINN. J.L. SCI. & TECH. 1 (2008) [hereinafter Morse, *Determinism*]; Gideon Yaffe, *Libet and the Criminal Law's Voluntary Act Requirement*, in CONSCIOUS WILL AND RESPONSIBILITY ch.16 (Walter Sinnott-Armstrong & Lynn Nadel eds., 2010), available at <http://www-bcf.usc.edu/~yaffe/assets/lawandaction/Libet&Crim%20Law-Final.pdf>; Michael S. Pardo & Dennis Patterson, *Neuroscience, Normativity, and Retributivism*, in THE FUTURE OF PUNISHMENT (Thomas Nadelhoffer ed., forthcoming), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1783823. Views discussed *infra* Part I.

⁴ See *infra* Part I.B.

doctrinal sense is supported by modern science.⁵ Alternatively, commentators have studied the assumptions about free will that underpin the foundational, moral principles of punishment, such as the principles of retribution articulated by philosophers of criminal law.⁶ This enduring focus on doctrine and theory has obscured the more significant ways in which assumptions about free will drive criminal law. It turns out that the technical notion of free will presupposed by legal doctrine and retributive theory departs significantly from the ordinary “folk” concept of free will – that is to say, the average person’s understanding of what it means to act freely; folk beliefs about free will influence criminal law, albeit in an indirect and subtle way, and it is here that the challenge from modern science is most relevant.

Potentially problematic assumptions about free will have a role to play in criminal law not because they underlie substantive legal doctrine or retributive theory, but because everyday actors in the sentencing process are authorized to make irreducibly *moral* determinations outside of the ordinary doctrinal framework. These moral determinations contain implicit judgments about free will. Jurors, judges, and legislators are each required, at key points in the sentencing process, to make moral judgments that cannot be reached without reference to the person’s own understanding of human agency. As a result, sentencing actors give legal effect to widely held folk beliefs about free will, beliefs that *are* in fact threatened by modern science.

The way that jurors, judges, and legislators conceive of human agency will undergo change, but not because modern science threatens to persuade the general public that criminals altogether lack free will. Instead, modern biological science will change adjudicators’ assumptions by showing that free will has a much smaller role to play in human behavior and the

⁵ See sources cited *supra* notes 2, 3.

⁶ See sources cited *supra* notes 2, 3.

conditions for moral responsibility are instantiated far less frequently than people tend to think. A large body of empirical evidence suggests that people tend to ignore the ways in which human behavior is causally influenced by factors like social deprivation and mental defect because of exaggerated beliefs about the causal significance of “free will.” In other words, people tend to explain by default most criminal conduct in terms of the offender’s “evil will” and, as a result, under-recognize the influence of environmental and biological factors. If sentencing actors are indeed vulnerable to this tendency, then modern science really does have radical implications for criminal law. By exposing the wider public and key sentencing actors to increasingly vivid illustrations of the underlying causes of human misbehavior, modern science will move the legal system towards a more realistic view of why criminals behave the way they do – a view that places far less explanatory emphasis on free will.

Not only is this change in the assumptions that drive criminal law forthcoming, the change is *morally desirable*. As they begin to see criminogenic factors like social deprivation and genetic predisposition as causally implicated in crime, sentencing actors will in turn become more responsive to moral arguments for mitigation that appeal to the role of such factors in causing bad behavior. In other words, modern biological science promises to bring the punitive instincts of the general public and key sentencing actors closer in line with the ideals of retributive proportionality and the requirements of justice. By single-mindedly focusing on the doctrinal or “legal” concept of free will, and by asking whether assumptions about free will can be completely eliminated from the criminal justice system, existing scholarship has obscured the most powerful ways in which modern science could have a corrective moral influence on criminal law.

The question that motivates this Article lies at the intersection of criminal law, modern biological science, and moral philosophy – informed engagement with the question thus requires some exposure to all three disciplines. Part I begins with a basic overview of the disagreement between criminal law scholars and the “free will skeptics” or – as this Article refers to them – “reformists.”⁷ It explains how reformists have seized on recent experimental results to pose anew a challenge to free will and criminal responsibility that is as old as moral philosophy. It engages with the response from criminal law scholars who dismiss the challenge by pointing out that where legal doctrine and retributive theory refer to “free will” they refer to a fairly technical legal term of art. The legal concept of “free will” withstands scientific scrutiny – criminals are able to act “freely” in the relevant sense despite recent developments in science.

The remainder of the Article focusses on developing an alternative and more plausible line of argument on behalf of reformists. Part II provides concrete examples of discretionary moral adjudication in the criminal justice system. An analysis of relevant case law underscores the moral content of judgments that discretionary actors in the criminal justice system are authorized to make – judgments about proportionality and mitigation in sentencing. Then, Part III demonstrates that the judgments made by discretionary actors are likely distorted by folk assumptions about free will. Empirical evidence suggests that sentencing actors are vulnerable to the tendency to over-estimate the causal significance of free will and, connectedly, under-recognize the influence of contextual, criminogenic factors on behavior; as a result, sentencing actors tolerate harsher punishment than they otherwise would. Part IV offers a moral philosophical explanation of the empirical data. Individuals who have an exaggerated belief in

⁷ Note that the term “reformist” is not standardly used to refer to advocates of the position described. The label is employed here for ease of discussion

free will punish more harshly because their unrealistic assumptions about criminal behavior render them insensitive to moral considerations that militate in favor of restraint and mitigation in sentencing. Part V concludes by explaining how modern science could have an important corrective effect in this context.

Part I. Will Modern Science Transform Criminal Law? The Reformist Thesis and its Critics

The structure of this Part is as follows. It begins with examples of recent developments in science that have captured the imagination of reformists. It explains how these developments are made to seem threatening to belief in free will, and it situates the reformist attack on free will within a critique of the criminal law's assumptions. Next, it describes the response from criminal law scholars. Here, it becomes necessary to engage with the philosophical literature on free will and determinism to show, in particular, that there are ways of conceptualizing what it means to act freely that are consistent with the new science – the law scholars seize upon this fact to argue (quite effectively) that the *legal* concept of “free will,” as expressed in substantive doctrine and retributive theory, is compatible with deterministic science. This Part concludes by briefly considering some of the reasons why commentators on both sides of the debate have focussed on the technical notion of free will underpinning criminal law doctrine and retributive theory.

A. Recent Developments in Science

Reformists motivate their position by drawing on a number of surprising results in neuroscience, genetics, and cognitive psychology – results that purportedly undermine the belief that criminal, or otherwise immoral, behavior is uniquely caused by an internal faculty in agents called “free will.”

The neuroscientist David Eagleman describes a strand of empirical work that reveals causal links between identifiable brain abnormalities and violent or otherwise wrongful impulses in individuals.⁸ He describes how tumors that impinge on a brain region called the amygdala – a region involved in emotional regulation, especially of fear and aggression – can cause individuals to act in uncharacteristically violent ways.⁹ Similarly, tumors in the pre-frontal cortex can give rise to pedophilic and sexually deviant urges in individuals.¹⁰ These urges seem to disappear when the tumor is excised – a fact that further supports an inference of a causal link between the brain abnormality and the behavioral disposition.¹¹

Such findings reflect a basic tenet underlying contemporary neuroscience – that behavioral differences across individuals are fully a product of subtle differences in brain function. Eagleman thinks that the general public, impressed with the evidence that not everyone is biologically “equipped” to make socially appropriate choices, will become doubtful of their default assumption that criminal conduct reflects a wrongdoer’s “free choice” – Eagleman claims that “the most cursory examination of the evidence demonstrates the limits of that [“free choice”] assumption.”¹²

Another strand of research that has influenced the reformist movement is best exemplified by Benjamin Libet’s famous experiment. Libet demonstrated that whereas subjects become aware of an intention to commit a basic voluntary act – like raising a hand – 200 milliseconds before the actual act, there is a surge of non-conscious activity in their brains beginning 550 milliseconds before the act (referred to as the “readiness potential”) that seems to

⁸ See Eagleman, *supra* note 1, 1.

⁹ *Id.* at 2.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.* at 1.

determine whether or not they commit the act.¹³ In other words, the awareness of a decision to act seems to *follow* the unconscious neurological processes that appear to initiate action. Libet's studies suggest that the raw feeling of choosing to act may be little more than the illusory after-glow of a process initiated by the unconscious brain.

Reformists have drawn on Libet's results to argue that the empirical evidence makes it seem unlikely that conscious volition has a significant role to play in decision making.¹⁴ If "voluntary action" is distinguished from non-voluntary bodily movement on the basis that the former is uniquely caused by a mental state that the agent is conscious of, then Libet's studies would seem to cast doubt on the very possibility of voluntary action. His experiments suggest that complex neuronal processes – processes that fall under the radar of conscious awareness – are causally responsible for actions that we, perhaps mistakenly, consider as paradigmatically voluntary.

A third strand of research that proves useful to the reformist cause reinforces our understanding of the link between criminality and genetic/environmental predisposition. For instance, correlations between convictions for crime and variations in the gene for monoamine oxidase A, a protein that plays an important role in the brain, have been known since at least 2002.¹⁵ Sociological studies indicate that the MAOA variant, when combined with adverse environmental stimuli like childhood maltreatment, strongly correlates with convictions for violent crime.¹⁶ Recent neuroscientific investigation has bolstered the view that the MAOA

¹³ Yaffe, *supra* note 3, at 1 (describing Libet's experiments).

¹⁴ *Id.*

¹⁵ See Brunner, H.G., Nelen, M., Breakefield, X.O., Ropers, H.H., Oost, B.A. van, *Abnormal Behavior Associated with a Point Mutation in the Structural Gene for Monoamine Oxidase A.*, 262 *SCIENCE* 578 (1993); Avshalon Caspi et al, *Role of Genotype in the Cycle of Violence in Maltreated Children*, 297 *SCIENCE* 851 (2002).

¹⁶ Matthew L. Baum, *The Monoamine Oxidase A (MAOA) Genetic Predisposition to Impulsive Violence: Is it Relevant to Criminal Trial*, *NEUROETHICS* (forthcoming 2012), available at <http://philpapers.org/rec/BAUTMO-3>

variant combined with negative environmental stimuli causally predisposes individuals to crime. In particular, scientists have developed an understanding of the neurobiological mechanisms by which the MAOA variant confers risk of violent behaviour: “[the variant] is linked to a neuro-transmitted system and functional difference in brains areas known to be involved in anger production and control.”¹⁷ By providing causal explanation and data on mechanism, neuroscience has lent greater plausibility to the view that an unlucky genetic variant and a deprived childhood can substantially predispose individuals to criminal behaviour.¹⁸

Reformists argue that the various strands of research taken together undermine the notion that human behaviour stems from a faculty in agents called free will – one that transcends the material brain and is undetermined by prior causes. The results underscore that differences in brain function, and hence behaviour, are determined by genetic and environmental variables – that is, factors we lack direct control over.¹⁹ As further studies convey this basic insight to society at large, modern science, the argument goes, will erode the widely held belief in free will.

B. The Reformist Critique of Criminal Law

Notably, some of the scientific output discussed above is already being introduced in criminal cases to support novel claims of mitigation or excuse. In a 2007 case involving kidnapping and

(“[Studies showed] although only 12% of the boys in a sample of 1037 NZ children were maltreated and possessed the low MAOA genotype, they were responsible for 44% of the convictions for violent crime.”).

¹⁷*Id* at 18.

¹⁸*Id* (observing that it is especially plausible that the MAOA variant predisposes given our neuroscientific understanding).

¹⁹ It is worth pointing out that many critics of the reformist position accept this naturalistic conception of the human. *See, e.g.*, Morse, *Determinism*, *supra* note 3, at 14 (observing that “[m]ost philosophers and scientists believe that the universe is deterministic or universally caused” and agreeing that “rationality demands” that we accept the non-existence of free will). *See generally* Greene & Cohen, *supra* note 1 (noting the scientific consensus around the deterministic conception of human behavior); Paul Bloom, *Free Will Does Not Exist. So What?* THE CHRONICLE REVIEW, Mar 18, 2012, <http://chronicle.com/article/Paul-Bloom/131170> (observing that most scientists and philosophers agree with the deterministic picture).

sexual abuse, the defense introduced PET scans of the defendant's brain in an attempt to show that, due to brain abnormalities, the defendant, Braunstein, was incapable of forming intentions or plans during the sexual assault of a former co-worker, and thus lacked the necessary *mens rea*.²⁰ Notably, the defense did not pursue a traditional insanity plea. It attempted, instead, a defense based on a creative interpretation of scans showing dysfunction in Braunstein's frontal lobe – the part of the brain that regulates personality, planning, and impulse control. Similarly, in a Florida death penalty case, *Sexton v. State*, a psychologist testified that the defendant's impaired self-control due to brain abnormality ought to be a mitigating factor against the death sentence; the psychologist presented brain scans that revealed dysfunction in the defendant's prefrontal cortex.²¹ In the Supreme Court case *Roper v. Simmons*, which held the death penalty unconstitutional as punishment for murder by a juvenile, the American Medical Association filed an amicus brief observing that “scientists can now demonstrate that adolescents are immature not only to the observer's naked eye, but in the very fibers of their brain.”²²

Although the scientific evidence did not control the outcome in the cases mentioned – Braunstein received a sentence of 18 years to life, the trial court imposed the death penalty in *Sexton*, and the Court in *Roper* made clear that the neuroscience was not an independent factor in its holding – those championing the reformist cause remain optimistic. Reformists believe that we are at the cusp of a sea-change in criminal law, and that these initial cases reflect only the

²⁰ See Walter Glannon, *What Neuroscience Can and Cannot Tell Us about Criminal Responsibility*, in *LAW AND NEUROSCIENCE*, 13 CURRENT LEGAL ISSUES 15 (Michael Freeman ed., 2011) (discussing the cases described here).

²¹ *Sexton v. State*, 997 So.2d 1073, 1077 (Fla. 2008).

²² American Medical Association APA, American Academy of Psychiatry and the Law, American Society for Adolescent Psychiatry, American Academy of Child & Adolescent Psychiatry, National Association of Social Workers, Missouri Chapter of the National Association of Social Workers, and National Mental Health Association. Brief of amicus curiae supporting respondent, *Roper v. Simmons*, 543 U.S. 551 (2005). See also *Roper*, 543 U.S. at 569-70 (2005).

beginnings of a broader movement of reform. While the latest scientific results may not be influencing judicial decisions at the moment, this will change once the deterministic conception of the human underlying modern science wins greater mainstream and legal acceptance. The law will adapt and become more receptive to the full, transformative import of the empirical evidence once its enduring assumptions about “free will” are systematically debunked.

One reformist camp contends that entrenched assumptions about free will underpin the theoretical justifications for the criminal justice system, and the way we sentence will change once those assumptions are finally defeated by scientific progress. Greene and Cohen (henceforth “G&C”) put forward a version of this argument in an influential and much-discussed article.²³ G&C observed that criminal law relies on retributive theories of criminal punishment – theories famously propounded by Immanuel Kant and others – according to which criminal wrongdoers are punished because they *deserve* to be. The impulse to visit retribution on criminals has a strong hold on us, and a retributive penological scheme, they argued, to a large extent governs who the law punishes and by how much. But retributive theories presuppose the existence of free will. If your behavior is fully determined by factors you had no control over, it makes no sense to think that you *deserve* to be punished for acting badly.²⁴ After all, biological and environmental determinism make a lottery of who ends up behaving badly and getting punished for it. G&C predict that the criminal law will have to revise its rationales for punishing

²³ Greene & Cohen, *supra* note 1, at 1776. *See also* Jones *supra* note 2.

²⁴ Greene & Cohen, *supra* note 1, at 1776, 1784 (“Free will as we ordinarily understand it is an illusion generated by our cognitive architecture. Retributivist notions of criminal responsibility ultimately depend on this illusion, and, if we are lucky, they will give way to consequentialist ones, thus radically transforming our approach to criminal justice.”). *See also* Chiesa, *supra* note 2, at 12 (arguing that a rejection of retribution will lead to more humane punishment because “blaming other people for their sins and crimes loses meaning in a world without free will”); Jones, *supra* note 2.

criminals as the law's default assumption that criminal actors have free will is comprehensively undermined.²⁵

A second reformist camp believes that problematic assumptions about free will find expression in substantive legal doctrine. The neuroscientist David Eagleman²⁶ and law scholar Luis Chiesa²⁷ argue that criminal law needs to change in the face of scientific determinism because criminal law doctrine, in its requirements for criminal culpability, makes a default assumption about the existence of free will. Chiesa, for example, contends that the assumption that criminal actors have free will is embedded in “many foundational doctrines of criminal law, including the voluntary act requirement, the insanity defense and the general theory of excuse defenses.”²⁸ As a result, “[o]ur criminal laws presuppose the existence of freely willed actors.”²⁹ Consider, for instance, the voluntary act requirement: criminal liability depends on the defendant having engaged in the *actus reus* (“guilty act”) of the offense charged.³⁰ According to a basic principle of criminal law, as articulated in the Model Penal Code, an act is guilty only if “voluntary.” Chiesa cites cases in which judges use the language of free will to explain this notion of voluntariness.³¹ For example, in *U.S. v. Cullen*, the court observed that “in the

²⁵ Greene & Cohen, *supra* note 1, at 1776

²⁶ See Eagleman, *supra* note 1, ¶27 (arguing that the legal system's treatment of individuals as “practical reasoners” assumes at bottom that we have free will – an assumption threatened by neuroscience). See also Eagleman, *supra* note 2.

²⁷ See Chiesa, *supra* note 2, at 18 (arguing that the law's voluntary act requirement presupposes a notion of free will incompatible with determinism, and that similar assumptions “lie at the heart of many foundational doctrines of criminal law”).

²⁸ *Id.*

²⁹ *Id.*

³⁰ See Model Penal Code § 1.13(2) (Proposed Official Draft 1962) (“A person is not guilty of an offense unless his liability is based on conduct which includes a voluntary act or the omission to perform an act of which he is physically capable”). The model penal code gives little guidance on the concept of voluntariness, defining the term in the negative – reflexes and bodily movements during sleep or lack of consciousness do not constitute voluntary acts. *Id.* See also *State v. Case*, 672 A.2d 586, 589 (Me. 1996) (“To be voluntary an act must be the result of an exercise of defendant's conscious choice to perform [it], and not the result of reflex, convulsion”).

³¹ Chiesa, *supra* note 2, at 15, 17.

narrowest sense, every crime must be the product of the defendant's free will."³² Such language seems to indicate that the law's voluntary act requirement reflects a background presumption that a wrongdoer's culpability is grounded in his having acted freely.

If either substantive criminal law doctrines or the moral theories that are foundational to the criminal legal system have presumed the existence of free will in a way that is inconsistent with the scientific worldview, then the reformists would appear to have a point. Criminal actors, viewed through the lens of legal doctrine and retributive theory, are presumed to have a faculty that the science is showing they lack. Reformists like Greene, Cohen, Eagleman, and Chiesa think that once the scientific conception of the human wins greater mainstream acceptance, the law will have to stop treating criminals as "freely willing actors," and that this will have a transformative impact on the way we punish.³³ The next Subpart expands on the response from criminal law scholars and the moral philosophical tools they use to counter reformist claims.

³² 454 F.2d 386, 390-391 (1971).

³³ As the scholarly and media attention indicates, modern discoveries in neuroscience resonate far beyond philosophical debate. Something like the modern reformist movement was predicted decades ago by Meir Dan-Cohen,

There is no escaping the recognition that the requirements of voluntariness are locked in a deadly, and possible losing, battle with determinism. Scientific (psychological, biological, or medical) explanations . . . almost invariably increase the deterministic element in our view of human conduct. . . . The more such accounts we possess, the greater the encroachment on a presupposition of voluntariness that underlies the criminal law.

Actus Reus, in 1 ENCYCLOPEDIA OF CRIME AND JUSTICE 20-21 (Sanford H. Kadish ed., 1983).

The issue has attracted not just unfunded academic interest but research generously funded by such sources as the John D. and Catherine T. MacArthur Foundation. The MacArthur Foundation announced in 2007 a 3-year grant of \$10 million to establish the "Law and Neurosciences Project," which would explore the question: "[h]ow would the law deal with theories that suggest that people's actions are not the direct result of prior intentions, that free-will is an illusion, that consciousness itself is a mere penumbra of the brain's activities?" *Announcement of Law and Neuroscience Project*, MACFOUND.COM, <http://www.macfound.org/press/speeches/announcement-law-and-neuroscience-project-jonathan-fanton-federal-court-house-new-york-ny-october-9-2007/> (last visited Dec. 24, 2011).

C. The Response from Law Scholars: “Compatibilism” about the Legal Concept of Free Will

Both versions of the reformist argument have been pointedly criticized by scholars of criminal law. The critics point out that philosophers have been debating the relationship between deterministic science and free will for millennia. A basic insight that emerges from this debate is that whether or not the scientific worldview threatens belief in free will depends on what it means to act freely – and what it means is controversial. The law scholars have coalesced around the view that at least as far as the criminal law is concerned, the kind of “free will” that substantive doctrine and retributive theory require is compatible with science. In other words, the criminal law regards the culpable criminal actor as “free” in a way that is not at all threatened by modern science.

Theorists draw a distinction between two basic ways of conceptualizing what it means to have “free will.” An account of what it means to act freely is described as “compatibilist” if it allows for the possibility of freely willed action even if all our actions are fully determined by natural laws and remote events in the past.³⁴ In contrast, on the “libertarian-incompatibilist” view, acting freely involves acting on the basis of a special capacity that we possess only if the deterministic thesis is false. The distinction between these different ways of conceptualizing free will turns out to be vital to the resolution of the debate.

While there are many flavors of “compatibilism,” an illustrative example of this type of view can be found in Harry Frankfurt’s “hierarchical mesh theory of free will.”³⁵ Frankfurt’s view is discussed here merely as an example of a theory of free will that is compatible with

³⁴ Anders Kaye, *The Secret Politics of the Compatibilist Criminal Law* 55 KAN. L. REV. 365, 374-79 (2007) (describing compatibilist accounts of free will).

³⁵ Harry Frankfurt, *Freedom of the Will and the Concept of a Person*, 68 J. PHIL. 5 (1971).

deterministic science – the details of the view are not essential to this Article’s core argument. Frankfurt’s mesh theory explains freely willed action in terms of action that stems from desires of a certain sort. According to the mesh-theorist, a person acts freely as long as she acts on the basis of a desire that suitably “meshes” with other elements of her psychology, such as her “second-order desires”. A first-order desire takes a particular action as its object, such as drinking a cup of coffee, whereas a second-order desire is a desire for other desires. The mesh-theorist can explain why agents fail to act freely in certain paradigmatic cases. Consider for instance an opiate addict who acts on the basis of an irresistible or pathological impulse to take drugs. The addict acting on such an impulse may well disavow her behavior – that is to say, she may wish that she could resist her first-order desire to take drugs. When there is a sufficiently large breakdown in the hierarchical mesh between the various desires that constitute a person, as in the case of the extreme addict, the person fails to act freely on Frankfurt’s view.

Note that even if all desires are determined by factors beyond a person’s direct control – factors like genes and environment – this does not preclude the ability to act freely on the mesh theory. Even if human behavior is fully a product of causally-determined neural firings in the brain, as the reformists suggest, this does not preclude varying degrees of hierarchical mesh in an agent’s psychology. Our desires remain part of the causal chain that ultimately results in action, and desires can be more or less reflective of a person’s considered judgments about how she ought to act. In other words, the scientific worldview does not vitiate the kind of capacities “free agents” are assumed to have on the compatibilist picture. Biological determinism does not erase the distinction between the unwilling and regretful addict and a person who acts on the basis of a desire she endorses as reflective of her true self.

In contrast with compatibilist theories of free will, the “libertarian” or “metaphysically robust” conception of free will holds that a person acts freely only if she is the “ultimate cause” of her actions, and at the moment of choice, holding the laws of nature and past events constant, it is true that *she could have done otherwise to what she did*.³⁶ The libertarian conception of free will is notoriously hard to pin down, but the idea seems to be that humans have an internal faculty that enables them to intervene in the causal flow of the universe as uncaused causal forces. The human self transcends and operates independently of the determining influence of external factors like genes and environment. Determinism and the scientific worldview plainly threaten this metaphysically immodest conception of the human actor.³⁷

Criminal law scholars critical of the reformist thesis observe that the *legal* concept of “free will” is, in fact, *compatibilist*. They persuasively argue that substantive legal doctrine does not rely on a metaphysically suspect notion of free will. For instance, in a series of articles, Stephen Morse has tried to show that a careful examination of the American criminal code reveals no metaphysically suspect assumptions: in determining whether an agent acted “freely”, the law considers the actor’s general capacity to act on the basis of her own desires, the actor’s capacity to act consistently with her considered judgments, and the actor’s capacity for rational reflection, and *not* whether the actor was the ultimate cause of her actions in the metaphysically

³⁶ See, e.g., Gary Watson, AGENCY AND ANSWERABILITY: SELECTED ESSAYS 251-253 (2004) (describing the libertarian notion of free will).

³⁷ Even if the universe is not fully deterministic, so long as human behavior can be deterministically characterized to a reasonable approximation, there seems to be little room for libertarian free will. On a related point about “partial indeterminism,” see Galen Strawson, *The Impossibility of Moral Responsibility*, 75 PHILOSOPHICAL STUDIES 5, 18 (1994).

robust sense – in other words, the law’s conception of free agency is “compatibilist.”³⁸ As Morse puts it:

On rare occasions, a statute might include the phrase [free will]. *See, e.g.*, CAL. PENAL CODE § 261.6 (2007) (Consent to sexual activity must be “pursuant to an exercise of free will.”). It is clear, however, that free will in such instances simply is a proxy for more familiar, less metaphysical criteria, such as the absence of compulsion.³⁹

Morse’s claims finds further support in the work of Gideon Yaffe.⁴⁰ Yaffe analyzes the Model Penal Code’s “voluntary act” requirement, “by looking at the theory of voluntary action popular in 17th and 18th century Britain during the period in which the criminal law’s voluntary act requirement became what it is today, a theory disseminated in part through the works of John Locke.”⁴¹ Locke’s notion of a voluntary act is famously *compatibilist* – that is, consistent with deterministic science.⁴² Morse and Yaffe, thus, present compelling reasons to think that criminal law does not rely on a problematic notion of free will in its substantive doctrine.

The theoretical version of the reformist argument invites a similar set of objections. Recall that G&C claimed that retributive theory presupposes the existence of free will, and that the law will have to change as retribution loses credibility in the light of modern science. Law scholars Michael Pardo and Dennis Patterson rightly point out that even if G&C are correct in their prediction that people will worry that no one really deserves to be punished once they accept the scientific worldview, this hardly entails that the law *ought* to change in response to

³⁸ Stephen J. Morse, *Avoiding Irrational NeuroLaw Exuberance: A Plea for Neuromodesty*, 62 MERCER L. REV. 837, 844 (2011); Morse, *Determinism*, *supra* note 3, at 4 n.5 (“[P]erusal of any American criminal code or judicial opinions will confirm the absence of libertarian free will as a genuine criterion.”); Morse, *Lost in Translation*, *supra* 3.

³⁹ Morse, *Determinism*, *supra* note 3, at 4 n.5.

⁴⁰ Yaffe, *supra* note 3.

⁴¹ *Id.* at 2 (“Has Libet [whose famous studies revealed the unconscious origins of people’s decisions] shown our acts not to be voluntary in the sense that is of relevance to the law? The answer to this last question is, given some plausible empirical assumptions, probably no.”).

⁴² *See* John Locke, AN ESSAY CONCERNING HUMAN UNDERSTANDING 226 (Roger Woolhouse ed., Penguin Classics 1998) (1689) (“[T]he will in truth, signifies nothing but a power, or ability, to prefer or choose.”).

people's worries.⁴³ As Pardo & Patterson observe, "it is possible for widely-shared intuitions about what is just punishment to be mistaken If neuroscience were to cause a significant shift away [from] retributive intuitions (as they predict) it simply begs the question to assume that this shift would lead to more just (or more unjust) punishment decisions."⁴⁴

What makes the above objection especially potent is that there are very good reasons to think that concerns about the legitimacy of retributive punishment are likely to be unfounded. Stephen Morse offers a debunking diagnosis of the tendency to take biological determinism as entailing that no one deserves punishment. This tendency, he claim, stems from the error of thinking that "causation of behavior is per se an excusing condition."⁴⁵ The fact that a person's wickedness stems from underlying physical causes does not render the person any less wicked, or make it unfair to punish him for his wickedness. There is a long-standing view in moral philosophy according to which retributive theories of punishment are fully compatible with the absence of metaphysically robust free will.⁴⁶ In fact, prominent criminal law theorists have developed retributive theories of punishment while explicitly endorsing the scientific worldview *and* a compatibilist account of free will like Harry Frankfurt's.⁴⁷ It suffices, for present purposes, to note that G&C assume, without serious normative argument, a claim that is highly controversial and finds limited support in legal philosophy – the claim that the absence of metaphysically robust free will necessarily renders desert based retributive theory indefensible.⁴⁸

⁴³ Pardo & Patterson, *supra* note 3, at 15,16.

⁴⁴ *Id.*

⁴⁵ Morse, *Determinism*, *supra* note 3, at 18.

⁴⁶ *Id.*

⁴⁷ For a critique of the idea that no one deserves punishment in a deterministic world, see Michael Moore, PLACING BLAME: A GENERAL THEORY OF THE CRIMINAL LAW 504-26 (1997), which develops a retributive theory while embracing determinism and without relying on metaphysically robust free will. *See also* Michael Moore, *The Determinist Theory of Excuses*, 95 ETHICS 909, 916 (1985).

⁴⁸ This controversial assumption is especially problematic considering that the development of criminal law was likely influenced by compatibilist moral philosophers. *See generally* Kaye, *supra* note 34. G&C do not offer a

To summarize: conventional arguments for the reformist thesis are vulnerable to two major objections. First, reformists have failed to convince that the criminal justice system regards the culpable criminal actor as having free will *in the metaphysically robust sense*; reformists have made the improbable claim that legal doctrine enshrines a problematic conception of the criminal actor in its positive rules. Second, the claim that retributive justifications for punishment necessarily presuppose metaphysically robust free will is a highly controversial, likely wrong, and, at any rate, hard-to-defend moral thesis; philosophers have developed retributive theories of punishment that require only that criminal wrongdoers have “free will” in the compatibilist sense in order to be deserving of punishment.

D. The Focus on Doctrine and Theory

The academic debate so far has focused exclusively on whether the doctrinal rules and foundational principles of criminal punishment rely on problematic assumptions about free will. In fact, even scholars who have explored the role of free will in criminal law independently of the contemporary debate have concentrated on doctrine and retributive principles.⁴⁹ This focus of

careful defense of their position that determinism renders retributive theories of punishment indefensible. Instead, they urge their audience to reflect on a single thought experiment describing a wrongdoer programmed to behave badly. Greene & Cohen, *supra* note 1, at 1779-80. They hope that their thought experiment shows that what Morse calls the “fundamental psycho-legal error” is “grounded in a powerful moral intuition that the law and allied compatibilist philosophies try to sweep under the rug.” *Id.* Morse replies:

Green and Cohen are right about ordinary peoples’ intuitions . . . but people make the fundamental psycho-legal error all the time. This is a sociological observation and not a justification for thinking causation or determinism does or should excuse behavior. . . . The lure of purely mechanistic thinking about behavior when causes are discovered is powerful, but should be resisted.

Morse, *Determinism*, *supra* note 3, at 19. Much ink has been spilled on the issue and it suffices to point out that G&C are unlikely to defeat retributive theory with a single thought experiment. Pardo & Patterson make a similar point:

Greene and Cohen assume that retributivism—and indeed all moral blame and praise—must be built on a foundation of ‘uncaused causation.’ But a retributivist can coherently reject the notion of uncaused causation and still allow for moral judgments. Even in a world of physical determinism, moral desert may be grounded in the control people have over their actions through the exercise of their practical rationality.

Pardo & Patterson, *supra* note 3, at 17.

⁴⁹ See, e.g., Richard C. Boldt, *The Construction of Responsibility in the Criminal Law*, 140 U. PA. L. REV. 2245, 2249 (1992) (exploring the criminal law’s ideological bias – free will v. determinism – by studying the law’s

existing scholarship is not entirely surprising. As Justice Marshall observed in *Powell v. State of Tex.*, “[t]he doctrines of *actus reus*, *mens rea*, insanity, mistake, justification, and duress have historically provided the tools for a constantly shifting adjustment of the tension between the evolving aims of the criminal law and changing religious, moral, philosophical, and medical views of the nature of man.”⁵⁰ Nevertheless, the next Part recommends a shift in scholarly focus, from doctrine and theory to the points of moral discretion in the criminal justice system.

Part II. Towards a New Account of the Role of Free Will in Criminal Law: Discretionary Actors in the Criminal Justice System

Instead of analyzing the technical notion of free will that underpins legal doctrine and retributive theory, this Part explores the ways in which a more ordinary, “folk” understanding of free will influences criminal sentencing. The first step in this enquiry involves examining the role of discretionary actors in the criminal justice system. At key points of the sentencing process, the binding force of doctrinal rules and principles is qualified by discretion. At such points, actors charged with implementing criminal law are endowed with the legal authority to make determinations on controlling normative questions outside of the ordinary doctrinal framework.

treatment of “loss of control” defenses and general excuse theory); James J. Hippard, *Unconstitutionality of Criminal Liability without Fault: An Argument for a Constitutional Doctrine of Mens Rea*, 10 HOUS. L. REV. 1039, 1043 (1972) (observing that the capacity for free choice is presumed in Anglo-American criminal law under the rubric of *mens rea*); Roscoe Pound, *The Role of the Will in Law*, 68 HARV. L. REV. 1 (1954) (examining the role of free will in the law and tracing the historical development of Anglo-American legal doctrine from the 18th century); Joseph D. Grano, *Voluntariness, Free Will, and the Law of Confessions*, 65 VA. L. REV. 859 (1979) (exploring the concept of free will as used in the law of confessions); Michael Moore, *Causation and the Excuses*, 73 CAL. L. REV. 1091 (1985) (presenting competing theories of punishment and explaining the excuses as consistent with determinism). For interest in the question outside of the American context, see, for example, Diana Young, *Rationalizing Compassion: Images of Moral Agency in Criminal Law*, (2008) (unpublished S.J.D thesis, University of Toronto), available at <http://search.proquest.com/docview/304379392?accountid=15172>, which explores the conception of free agency underpinning Canadian criminal law doctrines of necessity and duress, and Wolfram Kawohl & Elmar Habermeyer, *Free Will: Reconciling German Civil Law with Libet’s Neurophysiological Studies on the Readiness Potential*, 25 BEHAV. SCI. & L. 309 (2007), which explores the ramifications of Benjamin Libet’s studies of decision making for German law, given its explicit reliance on “free will.”

⁵⁰ 392 U.S. 514, 536 (1968).

One such opportunity for discretion occurs at the legislative stage, where elected representatives determine whether enacted penalties comport with the principle of proportionality.⁵¹ Another opportunity occurs at the sentencing stage of a capital trial, where judges and juries are charged with the task of determining whether the balance of aggravating and mitigating factors warrant clemency and a sentence less than death.⁵²

Analyzing these two instances of discretion reveals that the law grants unguided discretion to key actors in the sentencing process on important moral questions, and, in doing so, channels folk morality. The discussion that follows identifies the scope of legislator and juror discretion with reference to relevant case law, and highlights the irreducibly *moral* content of the judgments legislators and jurors are empowered to make. Part II contributes to the broader debate by exploring an overlooked channel through which a scientifically suspect conception of human behavior might influence who and how much we punish. If folk morality is informed by distorting beliefs about the role and causal significance of “free will,” then the law gives legal effect to such distortions via its discretionary scheme.

A. Proportionality as a Legislative Policy Choice

Proportionality in punishment is a well-established goal of criminal law. The Model Penal Code, for example, aims “to safeguard offenders against excessive, disproportionate, or arbitrary punishment.”⁵³ Proportionality, understood as congruity between the degree of sanction and an offender’s moral guilt, represents a limitation on the state’s power to incarcerate or execute

⁵¹ See *infra* Part II.A.

⁵² See *infra* Part II.B.

⁵³ §1.02 (Proposed Official Draft 1962).

individuals, and applies whether the state punishes to exact retribution, deter, or incapacitate.⁵⁴

Prominent theories of criminal law's justification declare proportionality to be an essential moral precondition on just punishment, and the principle finds approval in prevailing practice.⁵⁵

While courts occasionally review whether sentencing statutes in general, and as applied in particular cases, comport with the principle of proportionality, the responsibility (and authority) to make proportionality determinations falls almost entirely on state and federal legislatures. Three main factors define (and preserve) the scope of this allocation of responsibility: (i) in recent years congress and state legislatures have moved to limit judges' power in the fashioning of individualized sentences via mandatory sentencing statutes and sentencing guidelines that are presumptively binding on judges; (ii) courts are highly reluctant to engage in post-facto review of legislative policy choices *vis. a vis.* the principle of proportionality; (iii) the Supreme Court has interpreted the constitution as deferring almost entirely to the will of the people – as expressed in legislation – on the moral question of proportionality.

In the 1980's legislatures departed from a model of sentencing that grants judge's full discretion in fashioning individualized penalties.⁵⁶ The previously unchecked power of judges was transferred to legislatures via the enacting of mandatory minimum sentencing statutes and

⁵⁴ See H.L.A. Hart, PUNISHMENT AND RESPONSIBILITY 9 (1968) (“[I]t is perfectly consistent to assert both that the General Justifying Aim of the practice of punishment is its beneficial consequences and that the pursuit of this General Aim should be qualified or restricted out of deference to principles of Distribution which require that punishment should be only of an offender for an offense.”); Alice Ristroph, *Proportionality As A Principle of Limited Government*, 55 DUKE L. J. 263, 265-66 (2005) (observing that proportionality should be understood as a limitation on the state's power to punish).

⁵⁵ See, e.g., *Solem v. Helm*, 463 U.S. 277, 284 (1983) (finding a proportionality principle in the Eighth Amendment). *But see Harmelin v. Michigan*, 501 U.S. 957, 997 (1991) (observing that the Eighth Amendment prohibits only sentences “gravely disproportionate” to the crime committed). See generally Hart *supra* note 54.

⁵⁶ See Kevin R. Retiz, *The Status of Sentencing Guideline Reforms in the U.S.*, 10 OVERCROWDED TIMES 1, 8-10 (1999) (discussing the transformation in US criminal law).

the promulgation of guidelines that channel the judge's choice of sentence in individual cases.⁵⁷ For example, the Federal Sentencing Guidelines, while rendered advisory after *U.S. v. Booker*, encourage judges to make sentencing decisions based on specific combination of offense and offender characteristic and within a narrow range of recommended sentence;⁵⁸ mandatory minimum statutes, such as California's three strike laws, Federal anti-drug laws, and laws pertaining to non-contact child pornography offenses, require judges to impose specified and often strikingly severe penalties whenever offenders fall within a broadly-defined category.⁵⁹ The resulting regime gives unfettered expression to legislative determinations on how much punishment is appropriate for particular classes of offenders.

Courts have revealed a strong reluctance to second-guess the penalty determinations of the legislature. Even where penalties have been described by judges as "savage" and widely disproportionate to the crime, courts have declined to set the sentence aside.⁶⁰ In particular, the

⁵⁷ See 18 U.S.C.A §3553 (West 2010). For nearly 20 years, federal judges were generally required to impose sentences within the applicable guideline range. This system changed in 2005, when, in *U.S. v. Booker*, the Supreme Court rendered the guidelines advisory. 543 U.S. 224, 264 ("The district courts, while not bound to apply the Guidelines, must . . . take them into account when sentencing.").

⁵⁸ In 2005, five states had guidelines that were presumptively binding on judges; another eight states had guidelines that either had advisory force or were purely voluntary. See Rachel E. Barkow, *Administering Crime*, 52 UCLA L. REV. 715, 788-94 (2005).

⁵⁹ See, e.g., *State v. Berger*, 134 P.3d 378 (Ariz. 2006) (upholding a mandatory sentence of 200 years imprisonment without possibility of parole imposed on a first-offender for possession of 20 images of child pornography that he downloaded from the internet); 18 U.S.C. § 924(e) (2006) (describing penalties under the Armed Career Criminal Act). On states with mandatory minimums, see Stephen J. Schulhofer, *Rethinking Mandatory Minimums*, 28 WAKE FOREST L. REV. 199, 201-7 (1993), which discusses state and Congressional enactment of severe mandatory minimums for drug offenses in the 1980's, and CAL. DIST. ATTORNEYS ASS'N, PROSECUTORS' PERSPECTIVE ON CALIFORNIA'S THREE STRIKES LAW: A 10-YEAR RETROSPECTIVE 17 (2004), available at <http://www.cdaa.org/WhitePapers/ThreeStrikes.pdf>, which observes that between 1994 and 2004, 7,332 defendants were given sentences of twenty-five years to life under California's three-strikes law. On federal mandatory minimums, see U.S. SENTENCING COMM'N, SPECIAL REPORT TO CONGRESS: MANDATORY MINIMUM PENALTIES IN THE FEDERAL CRIMINAL JUSTICE SYSTEM app. A (2011), available at http://www.ussc.gov/Legislative_and_Public_Affairs/Congressional_Testimony_and_Reports/Mandatory_Minimum_Penalties/20111031_RtC_Mandatory_Minimum.cfm.

⁶⁰ In *US v. Jackson*, Judge Posner, in his concurrence, described the sentence of life without parole, imposed on a defendant who attempted a bank robbery the same day he was released from incarceration for previous robberies, as "savage" and noted:

Supreme Court has been willing to uphold virtually any sentence of imprisonment without engaging in substantive proportionality review, even sentences that appear strikingly draconian and disproportionate.⁶¹

Reasons for the rarity of successful challenges to the proportionality of enacted sentences can be found in the Supreme Court’s jurisprudence on the Eighth Amendment. While the cruel and unusual clause has been interpreted as requiring that penalties be proportionate to offenses, the Supreme Court has held that “it forbids only extreme sentences that are grossly disproportionate to the crime.”⁶² In *Atkins v. Virginia*, Justice Kennedy articulated the rationale for such an attenuated understanding of the scope of the Eighth Amendment; Kennedy observed that “the Amendment must draw its meaning from the evolving standards of decency of society . . . [The] *clearest and most reliable objective evidence of contemporary values is the legislation enacted by the country’s legislatures.*”⁶³ The Court referred approvingly to “our tradition of deferring to state legislatures in making and implementing such important policy decisions” as

I think the sentence Jackson received is too harsh and I think it appropriate to point this out even though he presents no ground on which we are authorized to set aside an excessively severe sentence . . . [Does] the sheer enormity of his conduct warrants imprisonment for the rest of his life as a matter of retributive justice[?] It does not. Few murderers, traitors, or rapists are punished so severely

835 F2d 1195, 1198-9 (1987).

⁶¹ For example, in *Ewing v. California* the Court upheld a sentence of life for a defendant who tried to steal three golf clubs on parole from a 9-year prison term, 538 U.S. 11 (2003), in *Lockyer v. Andrade* a sentence of 50 years to life for a recidivist who shoplifted videotapes valued under \$200, 538 U.S. 63 (2003), and in *Rummel v. Estelle* a life term for a defendant whose third offense was obtaining \$121 by false pretense, and whose two prior offenses were passing a forged check worth \$28 and fraudulent use of a credit card to obtain \$80 worth of goods, 445 U.S. 263 (1980). In *Lockyer*, Justice Souter for the four dissenters noted “if Andrade’s sentence is not grossly disproportionate, the principle has no meaning.” 538 U.S. at 83. See generally John F. Stinneford, *Rethinking Proportionality Under the Cruel and Unusual Punishments Clause*, 97 VA. L. REV. 899 (2011).

⁶² *Harmelin*, 501 U.S. at 959.

⁶³ *Atkins v. Virginia*, 536 U.S. 304, 311-2 (2002) (citations omitted) (emphasis added).

the proportionality of penalties,⁶⁴ and advised caution against judges imposing their “subjective values” on the subject of proportionality.⁶⁵

The court’s deference to the legislature results in penalties determined by popular morality. Under the current discretionary scheme, proportionality determinations reflect either the personal moral convictions of legislators or – what seems more likely – the convictions and penal demands of the general public. Legislators, subject to the forces of mass democratic politics, likely channel the penal demands and moral intuitions of their constituents.⁶⁶ The evidence to be introduced later suggests that popular convictions regarding fairness and proportionality in sentencing are strongly influenced by a scientifically suspect “free will” based conception of criminal agency.

B. Democratized Death Sentencing

The death penalty context provides another example of the way in which popular morality drives criminal law. In a series of cases since *Gregg v. Georgia*, the Supreme Court has developed a jurisprudence that stresses democratically-administered and individualized justice in capital cases; the court requires a sentence of death to reflect the unique circumstances of the defendant (individualization), and delegates the necessarily moral task of determining whether death as opposed to clemency is warranted in a particular case to the sentencing agent – in many cases,

⁶⁴ *Ewing*, 538 U.S. at 24, 27-8 (“Though three strike laws may be relatively new, our tradition of deferring to state legislatures in making and implementing such important policy decisions is longstanding. . . . Critics have doubted the law’s wisdom . . . [but] we do not sit as a superlegislature to second-guess these policy choices.”).

⁶⁵ *Harmelin*, 501 U.S. at 986 (“The real function of a constitutional proportionality principle, if it exists, is to enable judges to evaluate a penalty that some assemblage of men and women has considered proportionate--and to say that it is not. For that real-world enterprise, the standards seem so inadequate that the proportionality principle becomes an invitation to imposition of subjective values.”)

⁶⁶ See James Q Whitman, *HARSH JUSTICE* 199 (2003) (citing a variety of sources to defend the view that American harshness as driven by the penal demands of the general public); See generally Franklin E. Zimring, *Populism, Democratic Government, and the Decline of Expert Authority: Some Reflections on “Three Strikes” in California*, 28 PAC. L.J. 243 (1996).

the jury (democratization).⁶⁷ What results is a sentencing scheme that commits to the discretion of the sentencing agent a complex moral question – is the imposition of death a more appropriate moral response than clemency given the defendant’s background, character, and crime?

The current capital sentencing scheme in most states has emerged from the requirements articulated in *Gregg*.⁶⁸ In that case, the Supreme Court famously held that a capital sentencing scheme must allow the sentencing agent, whether judge or jury, to take into account the character and record of the defendant. Today all death penalty states require, with minor variations, three connected findings before a death sentence becomes lawful: a determination of “aggravating factors,” a determination of “mitigating factors,” and a balancing of aggravating and mitigating factors.⁶⁹ The death penalty is lawful only if the aggravating factors outweigh the factors that mitigate. In many instances, the responsibility for all three determinations falls squarely on the jury.⁷⁰

The Court has held that the question of what counts as a mitigating factor must be not be constrained by law. In *Lockett v Ohio*, the court announced that the legislature must leave unrestricted the category of mitigating factors.⁷¹ The Court insisted that *any* factor that might call for a lesser penalty, relating to the defendant’s background and character or to the circumstances of the offense, can count as a mitigating factor. Additionally, the Court held in *Buchanan v.*

Angelone that the constitution imposes no affirmative obligation on judges or legislatures to

⁶⁷ 428 U.S. 153 (1976) (holding Georgia’s capital sentencing scheme constitutional). On the role of the jury in capital trials, see Jeffrey Abramson, *Death-Is-Different Jurisprudence and the Role of the Capital Jury*, 2 OHIO ST. CRIM. L. J. 117, 148 (2004) (describing states that have jury determination of all aspects of capital fact-finding, and states in which juries are purely advisory); Bryan A. Stevenson, *The Ultimate Authority on the Ultimate Punishment: The Requisite Role of the Jury in Capital Sentencing*, 55 ALA. L. REV. 1091 (2003) (discussing the importance of the jury in capital trials).

⁶⁸ *Gregg*, 428 U.S. at 189-196.

⁶⁹ Abramson, *supra* note 67, at 153.

⁷⁰ *Id.* at 148.

⁷¹ *Lockett v. Ohio*, 438 U.S. 586, 604 (1978) (holding that the 8th and 14th Amendment require that “the sentencer, in all but the rarest kind of capital case, not be precluded from considering, as a mitigating factor, any aspect of a defendant’s character or record and any of the circumstances of the offense” that the defendant might proffer).

instruct the capital jury on mitigating factors, and that no definitional instruction need be given on any particular statutory mitigating factor.⁷² As a result, the Court has effectively committed the question of what counts as a mitigating factor to the unfettered discretion of the sentencing body.⁷³

The Court has emphasized that the sentencing body in capital trials is charged with a necessarily moral task. In *Spaziano v. Florida*, Justice Stevens observed that the death sentence “is the one punishment that cannot be prescribed by a rule of law as judges normally understand such rules,” but is instead *an ethical judgment* expressing the conscience of the community as to whether an “individual has lost his *moral entitlement* to live,” and in the “final analysis, capital punishment rests on not a legal but an ethical judgment- an assessment of . . . the *moral guilt* of the defendant.”⁷⁴

The important role played by the capital jury, given the ethical content of its decisions, presents a compelling example of the way sentencing determinations are driven by discretionary moral adjudication informed by popular will. The criminal justice system defers on a controlling moral question to the sentencing body – mitigating factors can make the difference in a death penalty case. A death verdict might turn on whether the jury regards, for example, the offender’s history of beatings by a harsh father and emotional disturbance since early childhood as a

⁷² 522 U.S. 269, 275 (1998).

⁷³ *McGautha v. California*, 402 US 183, 207 (1971) *reh'g granted, judgment vacated sub nom.* *Crampton v. Ohio*, 408 U.S. 941 (1972) (“[W]e find it quite impossible to say that committing to the untrammelled discretion of the jury the power to pronounce life or death is offensive to anything in the Constitution.”). For an example of jury instructions on mitigation, see Cal. Jury Instr. Crim. 8.88 (Spring 2010), “A mitigating circumstance is any fact, condition or event which does not constitute a justification or excuse for the crime in question, but may be considered as an extenuating circumstance in determining the appropriateness of the death penalty.”

⁷⁴ 465 U.S. 447, 468-9, 481 (1984) (Stevens J., concurring in part and dissenting in part) (emphasis added).

mitigating factor.⁷⁵ The evidence to be introduced later reveals that the way in which jurors respond to such facts about an offender's history is influenced by their beliefs about free will.

C. Folk Morality in the Legal System

The features of the criminal justice system that have been highlighted bear significantly on the reformist debate. As the examples of legislative discretion in the fashioning of proportionate sentencing statutes and juror discretion in capital trials reveal, the criminal justice system is structured so that it defers to popular will on key moral questions – answers to which have dramatic consequences for defendants. Numerous scholars have argued that this discretionary scheme has produced an overly draconian regime of criminal sentencing.⁷⁶ The discussion to follow draws attention to the ways in which popular beliefs about free will could be biasing sentencing actors toward overly harsh and unfair penalties. If folk theories of moral responsibility and punishment are distorted by a scientifically suspect view of criminal behavior, then the criminal law gives legal effect to this bias via its discretionary scheme.

Part III. The Folk Psychology of Punishment and Free Will

Having highlighted the role of discretionary moral judgment in the criminal justice system, this Article defends the claim that people, generally, have a libertarian or metaphysically robust conception of free will that distorts their view of criminal behavior. The reported findings have not been discussed in the existing literature on the reformist critique of criminal law. These findings show that those who have a strong belief in free will are inclined to support harsher

⁷⁵ For similar facts in a capital trial, see *Eddings v. Oklahoma*, 455 U.S. 104 (1982).

⁷⁶ See sources cited *supra* note 66; *20 Years Later, Mandatory Minimum Sentences Are Still Mindlessly Draconian*, REASON.COM, <http://reason.com/blog/2011/11/18/20-years-later-mandatory-minimum-sentenc> (last visited Feb. 1, 2011).

penalties for criminals, and tend to unreasonably discount such underlying causes of crime as social deprivation and genetically-impaired impulse control. The discussion refers to this phenomenon as the “free will effect.”

A. The Folk Understanding of Human Freedom

Empirically-minded philosophers and cognitive scientists have only recently begun investigating, via systematic experimental studies, the contours of the common-sense “folk” notion of freedom. Studies have found that people are vastly more likely to describe our universe as indeterministic rather than deterministic,⁷⁷ and are inclined to think that a person *cannot* act freely if all our actions are determined by prior causes. For instance, in a study by Adam Feltz, Edward T. Cokely, and Thomas Nadelhoffer, subjects were given descriptions of a deterministic universe (where everything that happens is fully determined by the initial state of the universe and natural laws) and asked whether a criminal wrongdoer in such a universe commits a wrongful act (sexually assaulting a stranger/cheating on taxes) of his own free will.⁷⁸ They found that a significant majority of respondents believed acting freely to be incompatible with the world being deterministic.⁷⁹

A recent study by Shaun Nichols and Joshua Knobe offers similar evidence that people regard human choices as exceptional and undetermined by prior causes.⁸⁰ Nichols and Knobe

⁷⁷ Shaun Nichols, *Folk Intuitions about Free Will*, 6 J. COGNITION & CULTURE 57, 65-7 (2006) (reviewing studies that suggest that people tend to think that the world is not deterministic and human choices are not determined by external causes). Nichols points to studies that indicate that in some contexts people tend to revert to a deterministic conception of human behavior.

⁷⁸ Adam Feltz, Edward T Cokely, & Thomas Nadelhoffer, *Natural Compatibilism versus Natural Incompatibilism: Back to the Drawing Board*, 24 MIND & LANGUAGE 1, 11-13 (2009) (“The difference between matched compatibilist and incompatibilist responses was statistically significant [62% incompatibilist, 29% compatibilist]. . . In our studies, most participants expressed incompatibilist intuitions about free will.”).

⁷⁹ *Id.*

⁸⁰ Shaun Nichols & Joshua Knobe, *Free Will and the Bounds of the Self*, in OXFORD HANDBOOK OF FREE WILL 530 (Robert Kane ed., 2011).

made participants read a vignette that described a person, all of whose desires and thoughts (both conscious and unconscious) direct him *against* a particular action. Participants also read a symmetric vignette that substituted the person with a computer, and the desires and thoughts with computer programming. Subjects were asked whether the person/computer might engage in the act despite the contrary desires/software; “Participants tended to say that the computer could not possibly move its hand if all its software tells it to do otherwise but that John actually could move his hand *even if all of his desires and thoughts told him to do otherwise*... the difference between the cases was statistically significant.”⁸¹ Nichols and Knobe propose a suggestive theory to explain the results of their studies. They claim that the “results suggest that people’s ordinary understanding of human action is importantly different from the picture one finds in cognitive science.”⁸² In contrast with the scientific picture, which accounts for behavior wholly in terms of determined mental states and processes, “people’s ordinary understanding appears to involve something more – a separate self that stands outside all these states and processes and can choose to ignore their promptings.”⁸³

It suffices for present purposes to take cautious note of the findings. While some scholars have argued that subjects in the studies are simply confused about their own concept of free will,⁸⁴ subsequent studies have tried to account for the concerns raised, and the findings seem robust.⁸⁵ Although folk intuitions may not be monolithic, in many cases people clearly do at least perceive free will as being incompatible with a deterministic worldview. In combination with the

⁸¹ *Id.* at 551. The difference between the cases was statistically significant ($t(42) = 7.06, p < .001$). *Id.* at 554 n.10.

⁸² *Id.* at 551.

⁸³ *Id.*

⁸⁴ *Id.* at 533 (discussing opposing interpretations of the experimental findings).

⁸⁵ *Id.* at 533 (observing that subsequent studies have accounted for the worries and shown them to be red herrings). See also Feltz, Cokley, and Nadelhoffer *supra* note 78, at 8 (“[T]here may be discrete groups of people who have different concepts of free will. . .”).

evidence to follow, the results support the view that belief in metaphysically robust free will has an important role to play at least in the context of criminal punishment.

B. Free Will, the Fundamental Attribution Error, and the Effect on Punitive Impulses

There is well-documented evidence that people tend to ignore the bio-social causes of crime. Individuals are prone to commit what psychologists have termed the “fundamental attribution error” – providing causal explanations for the behavior of others in largely dispositional terms (“originating from the person’s character”) as opposed to situational terms (“originating from the person’s context”).⁸⁶ Criminological & psychological research since the 1950’s has shown that individuals are especially prone to underemphasize the role of situational factors in in the context of crime and punishment.⁸⁷ The attitudes of the general public with respect to the causes of crime are in sharp contrast with the views of mental health experts and scientists.⁸⁸ Moreover, those who view crime as mostly caused by deeply rooted character traits that are not shaped or influenced by biological, neuropsychological, environmental, and other situational factors, are regularly found to be more punitive than those who view crime as a manifestation of social and

⁸⁶ For a review of the evidence, see Shadd Maruna & Anna King, *Once a Criminal, Always a Criminal?: ‘Redeemability’ and the Psychology of Punitive Public Attitudes*, 15 EUR J. CRIM. POL’Y RES. 7, 8 (2009). Maruna & King observe:

[w]hen we see others behaving in negative ways, we tend to systematically underestimate the influence of environment and assume that this is the “type” of people they are (Jones and Nisbett 1971). This bias, then, has implications for our social attitudes and behaviors. Indeed, an expansive body of research has found that these causal attributions are consistently implicated in a surprising array of behavioral dynamics (Weiner 1985).

Id.

⁸⁷ *Id.* (reviewing several studies that suggest that individuals are prone to underemphasize the role of situational factors in crime).

⁸⁸ See Andrew E. Lelling, *A Psychological Critique of Character-Based Theories of Criminal Excuse*, 49 SYRACUSE L. REV. 35, 86-87 (1998) (“Trait psychologists and situationists continue to debate the point, but by now there is general agreement within the field that . . . stable internal dispositions affecting behavior across different situations, do exist . . . [but] play a far smaller role in human behavior than generally believed.”); Mark Cunningham, *Special Issues in Capital Sentencing*, 2 APPL. PSYCH. CRIM. JUSTICE 205, 208-9 (2006) (“In the mental health sciences, there is a bedrock assumption that choices and behavior are shaped and influenced by biological, developmental, cognitive, . . . and situational factors. . . . The interaction and convergence of these factors has been postulated as a primary cause of criminal violence . . .”).

biological conditions: “This correlation has been confirmed in both quantitative and qualitative studies of public opinion with samples ranging from university students to probation officers and judges to nationally representative public samples.”⁸⁹

The tendency to ignore the underlying bio-social causes of crime seems associated with a strong commitment to free will, and appears to influence attitudes toward punishment. For example, in a recent study by C.E. Tygart, 800 adult respondents, randomly chosen from California, were asked to select one of five categories concerning their position on the death penalty;⁹⁰ respondents were made to consider crimes where the death penalty could result and were subsequently asked to indicate on a sliding scale the degree to which they thought a criminal’s act was due to free will as opposed to “determined by such things as problems within a society or a poor social environment.”⁹¹ Tygart observed that 32% of the respondents thought that criminal acts *were entirely due to free will* as opposed to situational factors, and the mean response attributed 76% of the causal responsibility to free will.⁹² Moreover, “greater free will attribution was associated with a statistically significant increase in the support for capital punishment.”⁹³

⁸⁹ Maruna & King, *supra* note 86, at 8 (discussing the supporting studies).

⁹⁰C. E. Tygart, *Respondents’ ‘Free Will’ View of Criminal Behavior and Support for Capital Punishment*, 6 INT. J. PUB. OPINION RES. 371, 372 (1994). The five categories were: (1) opposition to the death penalty; (2) approval but wanted the penalty used less than currently; (3) supported death penalty at current levels of executions; (4) advocated increase of executions from current level; and (5) advocated substantial increase of executions from current levels).

⁹¹*Id.* (“Respondents were given ten alternatives of percentages of the behavior due to free will, ranging from ‘all’ to ‘none’, with intervals of 10 percent.”).

⁹²*Id.* at 373.

⁹³*Id.* The results were statistically significant ($r=.59$, $p<0.001$). The worry might be raised that the survey was badly phrased, given that it prevented subjects from responding that criminal behavior is both 100% due to free will and 100% due to background factors; ‘compatibilists’ would respond in this way, given that on their view, acts can be freely chosen as well as determined by external factors. However, this is not likely to have been a problem if we can trust the evidence in Part III.A, which suggests that the commonly accepted notion of free will is not compatibilist. At any rate, it remains striking that those who preferred to describe criminal behavior as freely chosen were revealed to be harsher.

Further evidence of a possible interaction between belief in free will and the attribution error, and a resulting effect on attitudes toward punishment, can be found in the capital jury context. Data gathered from capital juror interviews illuminates the process by which jurors reach their final sentencing decisions. Scott Sundby reports the following findings based on 165 juror interviews from 41 cases: less than half of jurors interviewed claim to be incorporating mitigating circumstances into the final sentence recommendation;⁹⁴ jurors who vote death are especially unreceptive to mitigating evidence and tend to have a strong belief in free will;⁹⁵ jurors who de-emphasize situational causes of crime strongly voice the view that the murderer acted of his own free will and could have chosen to be a decent person.⁹⁶ These attitudes amongst jurors prevail even when the defense has introduced substantial evidence of the effect of adverse circumstances on the offender's behavior.⁹⁷ Similar findings have been reported by other researchers.⁹⁸

⁹⁴ Scott E. Sundby, A LIFE AND DEATH DECISION: A JURY WEIGHS THE DEATHPENALTY 208, n4 (2005) (referring to studies that find that less than half of tested jurors are able to identify existing mitigating circumstances, and observing that the ability to identify mitigating circumstance makes a decisive difference in sentencing).

⁹⁵ Sundby identifies a type of influential juror that he describes as “‘fundamentalist’ in his belief that “certain types of murder morally require a sentence of death... almost to the exclusion of all other factors.” *Id.* at 125. He observes that:

Fundamentalists as a whole also tend to be strongly unreceptive to any explanation of a defendant's actions based on his or her life's events. Although a defendant may have called a number of witnesses, taking days and sometimes weeks to put on a case in mitigation, many fundamentalists had great difficulty even remembering what the defense had argued in favor of a life sentence.

Id.

⁹⁶ *Id.* at 125-30.

⁹⁷ *Id.*

⁹⁸ See Mona Lynch, *The Social Psychology of Capital Cases*, in PSYCHOLOGY IN THE COURTROOM 157, 167 (Joel D. Lieberman & Daniel A. Krauss eds., 2009) (“[M]itigating evidence plays a disturbingly minor role in jurors' deliberation.”); John H. Blume, Sheri Lynn Johnson, & Scott E. Sundby, *Competent Capital Representation: The Necessity of Knowing What Jurors Tell Us About Mitigation*, 36 HOFSTRA L. REV. 1035, 1061 (2008) (“[A] consistent theme in many penalty phase deliberations is whether, despite the facts in mitigation, the defendant could still have exercised his “free will.”). See also James Luginbukl & Julie Howe, *Discretion in Capital Sentencing Instructions: Guided or Misguided?*, 70 IND. L. J. 1161, 1180 (1995); Peter Meijes Tiersma, *Dictionaries and Death: Do Capital Jurors Understand Mitigation*, 1995 UTAH L. REV. 1 (1995); Abramson, *supra* note 67.

Not surprisingly, people's tendency to underemphasize the role of situational factors in crime is exploited by prosecutors.⁹⁹ In the death penalty context, "the state almost never endorses the defense's view that interacting adverse biopsychosocial factors were integral to the defendant's capital conduct."¹⁰⁰ Instead, the prosecution emphasizes the defendant's free choice, "[often] asserting that a defendant's crime stems entirely from his evil makeup and that he therefore deserves to be judged and punished exclusively on the basis of his presumably free, morally blameworthy choices."¹⁰¹

The link between an emphasis on free will to the exclusion of other factors and support for harsher sentences has been observed more generally.¹⁰² Studies have found "that those who believe criminal acts are the result of freely chosen and willful behavior are more likely to be punitive than those who feel crime is the result of external circumstances and constraints."¹⁰³ In a recent study by Sandra D Haynes, Don Rojas, and Wayne Viney, for example, "[d]eterminists

⁹⁹Craig Haney, *Violence and the Capital Jury: Mechanisms of Moral Disengagement and the Impulse to Condemn to Death*, 49 STAN. L. REV. 1447, 1459 (1997). Haney observes that

[T]he prosecution's implicit . . . "theory" of the typical capital case generally comports with the jurors' stereotypical beliefs about crime and punishment. The notion that a defendant's crime stems entirely from his evil makeup and that he therefore deserves to be judged and punished exclusively on the basis of his presumably free, morally blameworthy choices is rooted in a longstanding cultural ethos that capital jurors (like most citizens) have been conditioned to accept uncritically. Add to this the well-documented tendency of most people to commit . . . the "fundamental attribution error" As a result, the typical juror's preexisting framework for understanding behavior is highly compatible with the basic terms of the typical prosecutorial narrative.

Id. Note that although the scholarship on capital jury trials might make passing reference to the fact that jurors emphasize a wrongdoer's free will, commentators have not inferred from the data that folk beliefs about human agency systematically influence criminal sentencing.

¹⁰⁰ Cunningham, *supra* note 88, at 209.

¹⁰¹ Haney, *supra* note 99.

¹⁰² See Maruna & King *supra* note 86, at 7; Sandra D Haynes, Don Rojas, & Wayne Viney, *Free will, determinism, and Punishment*, 93 PSYCHOL. R. 1013 (2003). An issue that has not been carefully explored here but is worth reflecting on is the manner in which the rhetoric of free will is used to marshal political resistance to policies that emphasize the social and biological causes of criminal behavior; "tough-on-crime" politicians get elected on vocally libertarian platforms that charge criminologists of insufficiently recognizing our independent moral agency and ability to rise above our circumstances. See, for example, Samuel Scheffler's insightful analysis of the conservative attack on a range of liberal policies in the '80's. *Responsibility, Reactive Attitudes, and Liberalism*, 21 PHIL. & POL. 299 (1992). Scheffler suggest that conservatives tapped into a dissatisfaction that cut across party lines with the "attenuated" naturalistic notions of human agency apparent in liberal attitudes toward, among other things, criminal justice. *Id.*

¹⁰³ Maruna & King, *supra* note 86, at 7.

were compared with [those who believe in free will] with respect to philosophy of punishment. Data provided support for the contention that determinists are less punitive.”¹⁰⁴

C. Punitive Harshness Driven by a Distorted Conception of Criminal Agency

To summarize, the studies reveal a number of striking facts about folk theories of human behavior and attitudes toward punishment. The ordinary, folk concept of free will seems libertarian or “metaphysically robust” and in tension with a deterministic understanding of human behavior. Subjects have a tendency to ignore the situational causes of crime, and an emphasis on free will to the exclusion of situational factors is correlated with punitive harshness. One possibility is that those who are strongly committed to the existence of free will and punish more harshly are making a *moral* mistake when they fail to consider the contextual causes of criminal behavior. The discussion to follow supports this possibility by situating the free will effect in moral theory.

Part IV. The Principles of Fair Punishment & the Moral Inferences Blocked by a Distorted Conception of Human Behavior

This Part examines the free will effect through a moral lens. It argues that an exaggerated belief in free will makes sentencing actors harsher because it makes them less likely to attend to moral considerations that would otherwise restrain their punitive impulses. The relevant moral considerations derive from arguments for mitigation that appeal to the role of contextual factors in causing crime. In other words, it would be morally desirable for individuals to view free will as a less significant causal driver of behavior, because this would make them more attentive to

¹⁰⁴ Haynes, *supra* note 102.

the underlying causes of crime, which would in turn foster a greater sensitivity to moral arguments for punitive restraint. The discussion begins with an account of why factors like social deprivation and mental defect mitigate how much punishment a criminal deserves when they causally influence behavior. The discussion ends with an explanation of why belief in free will makes individuals ignore the underlying causes of crimes.

A. Why Being Attentive to the Underlying Causes of Criminal Behavior is Morally Important

The argument developed here relies on moral intuitions that are widely shared and relatively uncontroversial to show that underestimating the degree to which criminal behavior is determined by situational factors leads to biased moral judgments about sentencing. When we fail to attend to the criminogenic effects of such factors as social deprivation and mental defect, we end up being insensitive to arguments for mitigation that appeal to the role of such factors in causing bad behavior. Indeed, it should come as no surprise that sound ethical thinking requires thinking realistically about human psychology.¹⁰⁵ Nevertheless, it takes some work to specify precisely what it is, morally speaking, that we miss when we make unrealistic assumptions about the agential capacities of our peers.

A point of clarification leads directly into the substantive argument. As noted previously, scholars writing on the normative significance of deterministic science tend to embrace a view called “compatibilism.” Compatibilists think that we can come to deserve blame and punishment even if our actions are fully determined by forces external to us – a retributive penological

¹⁰⁵ Even those who think that moral judgments are irreconcilably relative to each person’s unique point of view acknowledge the possibility of moral improvement relative to those subjective standards. That is to say, it remains possible on even a subjectivist understanding of morality to persuade others – on their own terms – that their moral views are possibly mistaken. One way to do this is to point out where moral judgments are based on false empirical beliefs. The argument presented here proceeds along these lines.

scheme survives the truth of determinism intact. In contrast, “incompatibilists” insist that our actions must be *undetermined* in order to serve as a legitimate basis for holding each other morally responsible. On the incompatibilist’s view, finding out that genetics and social upbringing substantially influence human behavior is morally significant because it tends to show that agents lack “ultimate control” over their actions. Indeed, traditional reformists like Greene and Cohen have explicitly relied on incompatibilist assumptions to make their revisionist point about the new science. The moral argument advanced here does *not* depend on the controversial incompatibilist assumption that in order to deserve punishment it must be true that the criminal had a kind of control over his actions that he lacks in a deterministic world. On the view developed here, the fact that external factors causally influence human behavior does not *per se* mitigate or excuse criminal offenders. What the view relies on is merely the observation that the causal influence of *certain kinds* of external factors on an individual’s propensity to act criminally, given the unique way in which those factors influence behavior, mitigates how much punishment the individual deserves.

Although many factors can causally contribute to an agent’s propensity to behave badly – including mental handicaps, lack of education (including moral education), extremely deprived socio-economic conditions, and a genetic predisposition towards aggressive behavior – certain kinds of criminogenic factors *uniquely* mitigate how much punishment a wrongdoer deserves, and not because they vitiate the agent’s “ultimate control” over his actions. Contrast, for instance, a criminal who grew up in a single-parent household, was extremely neglected as a child, and suffered from poverty and extreme social deprivation, with one who grew up in a stable and financially secure household but happens to be genetically predisposed to malicious and extreme self-regarding behavior. The marginalized wrongdoer, insofar as his circumstances

disposed him towards crime, has a claim against society that bears on his punitive treatment that the other does not.

In particular, the marginalized criminal did not benefit from the basic conditions for human flourishing – conditions that each of us deserves – and this fact bears on his desert for criminal conduct. It bears on his desert because our collective failure to afford him better opportunities in life causally contributed to his wrongful behavior (per our assumption). Perhaps we could have prevented his criminal conduct by addressing the real and remediable harms of poverty and inequality. In other words, we might have prevented his crimes by discharging our independent moral obligations owed to him. The marginalized criminal's situation invites us to consider the possibility that we are, to some degree, complicit in his crime and deserve blame for being part of a society that chooses to leave a significant portion of its own behind.

The moral principle that motivates this line of thinking is that *our standing to punish wrongdoers depends on our having invested in measures to help people avoid punishment.*¹⁰⁶

Where society has some shared control over a criminogenic factor, societal obligations obtain to alleviate the effects of that factor. Social deprivation is an obvious example of a criminogenic factor that we have some control over.¹⁰⁷ Given the plausible assumption that we have a

¹⁰⁶ Other writers have made similar points about the relationship between communal standing to blame and collective responsibility for failing to rectify social harms. See Mari Matsuda, *On Causation*, 100 COLUMBIA L. R. 2195 (2000); George Wright, *The Progressive Logic of Criminal Responsibility and the Circumstances of the Most Deprived*, 43 CATH. U. L. REV. 459 (1994) (arguing that when it fails to make allowances for dire economic and social circumstances in punishment, the criminal law departs from the principle that punishment should track moral guilt); David L. Bazelon, *The Morality of the Criminal Law*, 49 S. CAL. L. REV. 385, 389 (1976) (describing cases that illustrate the way in which situational factors like social deprivation and mental defect reduce the offender's moral culpability, and observing that these factors are under-recognized in American sentencing); Thomas Scanlon, *WHAT WE OWE TO EACH OTHER* 256-67 (1999) (arguing that the moral justification for punishing wrongdoers depends on our ensuring adequate opportunities to avoid punishment).

¹⁰⁷ See e.g., Richard Delgado, "Rotten Social Background" Should the Criminal Law Recognize a Defense of Severe Environmental Deprivation? 3 LAW & INEQ. 9 23-34 (1985) (summarizing scientific evidence on the role of environmental deprivation in criminal behavior); Deidre Golash, THE CASE AGAINST PUNISHMENT:

collective moral duty to maintain a decent quality of life for the least well off, our failure to fulfill that duty, insofar as it perpetuates criminality, undermines our moral standing to punish criminals with underprivileged backgrounds. The failure entails that we did not do enough to help the underprivileged avoid a life of crime and the violence of the state.¹⁰⁸

The argument above is not meant to altogether deny the individual moral responsibility of criminal offenders who come from deprived backgrounds. An impoverished background does not excuse anti-social conduct or earn one the right to inflict suffering on others. The need to incapacitate and deter offenders will continue to count in favor of punishing criminals who come from poor backgrounds, their unfortunate and pitiable circumstances notwithstanding. Nevertheless, there is scope for mitigation in our punitive attitudes toward marginalized offenders, at least relative to other classes of offenders. It is worth recalling that our penal codes punish in the service of more than just utilitarian aims. Some degree of punishment tracks just deserts over and above what is strictly necessary to serve consequentialist goals. The recognition that in certain cases economic deprivation and our failure to remedy it had a substantial role to play in causing bad behavior will attenuate, at least to some degree, the retributive element in punishment.¹⁰⁹ (Some deterrence-based considerations for punishment may also be undermined when deterministic reflection forces us to recognize that there are other ways of preventing

RETRIBUTION, CRIME PREVENTION, AND THE LAW 155 (2005) (describing the broad agreement among criminologists that social factors such as income inequality and poverty contribute to crime).

¹⁰⁸ It bears emphasizing that such arguments for mitigation as discussed here do not depend on the assumption that the marginalized defendant lacks “ultimate control” over his actions. Even the wrongdoer who is genetically predisposed towards malicious conduct lacks ultimate control over his actions. However, unlike the marginalized defendant, the person genetically predisposed to malice may well have had many fulfilling opportunities in life. He does not appear to have a valid complaint against society. What could we have done in his case? What plausible complaint could he have regarding the way society has generally treated him?.

¹⁰⁹ Such mitigation “allows us to record the defendant’s complicity in her own plight and, at the same time, do at least some justice to the special difficulties under which she labors.” Gary Watson, AGENCY AND ANSWERABILITY: SELECTED ESSAYS 350 (2004).

wrongful behavior – for instance, fostering better opportunities for individuals to sustain a satisfactory life within the bounds of the law).

Morally distinguishing, in this way, social deprivation from other factors that causally influence crime may suggest a basis for an objection. Some might hold that much like those who are, say, genetically predisposed to malicious behavior, the poor cannot validly complain when they are enthusiastically punished for their crimes because society has done more than enough to help the economically deprived avoid punishment. The point, however, is not specific to the example of social deprivation. Undoubtedly, there will be cases where our collective failure to minimize the effects of *some* criminogenic factor will bear on how much we can justly punish. In a different case it may not be social deprivation but a congenital (yet treatable) mental disorder that underscores our failure to provide psychological assistance and other rehabilitative services to the vulnerable. The crucial point is that we need to be able to appreciate, whenever it is true, that (a) an identifiable criminogenic factor causally contributed to an individual's criminal propensities, and that (b) we should have done more to minimize that factor's influence.¹¹⁰ We will be less prone to acting violently against the disadvantaged criminal, when we realize that we failed to remedy the disadvantages that made him a criminal. Recognition of our collective moral failures stays the hand of vengeance.

Where the influence of criminogenic factors is morally significant, it bears on how much punishment is appropriate for affected offenders, and is, thus, directly implicated in questions of proportionality and mitigation. Retributive proportionality involves a correspondence between

¹¹⁰ Of course, (b) may or may not be true in any given case. Whether it is will undoubtedly depend on a whole host of moral considerations of the sort that ground collective social obligations generally. The relevant considerations need not be explicated in order to appreciate the thrust of the argument being presented here.

the degree of sanction and an individual's desert based on his offense and circumstances.¹¹¹

Recall that the moral-jurisprudential principle commanding retributive proportionality enjoys widespread support in practice and in theory.¹¹² The principle restricts how much the state can justly punish criminals.¹¹³ It commands the sanction-setting authority to limit punishment to what is deserved and morally appropriate. Similarly, the duty to mitigate requires the sentencing agent to be sensitive to the unique circumstances of an offender that arouse sympathy and militate in favor of clemency.¹¹⁴

A failure to attend to the role of criminogenic factors like social deprivation in criminal behavior therefore results in a failure to ensure justice in punishment.¹¹⁵ There are compelling

¹¹¹ On this point see Ristroph, *supra* note 54, and Kyron Huigens, *Rethinking the Penalty Phase*, 32 ARIZ. ST. L. J. 1195, 1203 (2000), which observes that “[t]he [relevant] question is only whether, roughly speaking, the punishment imposed is accurate with respect to the person's desert.”

¹¹² See Richard S. Frase, *Excessive Prison Sentences, Punishment Goals, and the Eighth Amendment: "Proportionality" Relative to What?*, 89 MINN. L. REV. 571, 646 (2005) (“Limiting retributivism is a sound jurisprudential principle which enjoys widespread support, and the Supreme Court has used this principle to place constitutional limits on the imposition of capital punishment, fines and forfeitures, and punitive damages.”).

¹¹³ For an example of a court applying the logic of retributive proportionality as a constraint on how much the state can punish, see *US v. Bajakajian*, 524 U.S. 321, 334-40 (1998), where the Court observed that offense gravity should be measured relative to the degree of harm done and the offender's culpability. See also George Wright, *The Progressive Logic of Criminal Responsibility and the Circumstances of the Most Deprived*, 43 CATH. U. L. REV. 459 (1994) (arguing that when it fails to make allowances for dire economic and social circumstances in punishment, the criminal law departs from the principle that punishment should track moral guilt).

¹¹⁴ The concurrence in *United States v. Moore* observed that although such factors as “weakness of intellect,” “mental defect,” and addiction do not *excuse* defendants or deprive them of criminal responsibility, what it is “feasible to do” with situational factors and general disabilities of self-control “is to accord them proper weight in sentencing.” 486 F.2d 1139, 1180 (D.C. Cir. 1973). Additionally, the Model penal Code recognizes, in its discussion of the provocation defense, that features of a wrongdoer's situation can reduce his blameworthiness and how much punishment he deserves; notably, it leaves the ultimate determination regarding which factors reduce blameworthiness to the “ordinary citizen.”

It is clear that personal handicaps and some external circumstances must be taken into account [I]t would be morally obtuse to appraise a crime for mitigation of punishment without reference to these factors In the end, the question is whether the actor's loss of self-control can be understood *in terms that arouse sympathy in the ordinary citizen*. Section 210.3 . . . leaves the ultimate judgment to the ordinary citizen in the function of juror assigned to resolve the specific case.

Model Penal Code §210.3 cmt. 63 (1980) (emphasis added).

¹¹⁵ The argument developed in this Part will not persuade everyone. To expect a knock-dead argument from a moralist would be to misunderstand the nature and purposes of moral enquiry. At the very least, the argument demonstrates that there are plausible and compelling arguments for mitigation one can make that appeal to the role of contextual factors in causing bad behavior, and that sentencing actors will be unreasonably biased against such arguments if they have an exaggerated belief in free will.

arguments for mitigation that appeal to the role of criminogenic factors in causing bad behavior, and individuals will fail to see the force of such arguments if they happen to be biased against evidence of contextual determinacy. The studies previously discussed already provide strong reasons to think that an exaggerated belief in free will results in such a bias. The next Subpart elaborates on the reasons why belief in free will makes individuals unfairly resistant to attending to the underlying causes of crime.

B. Why a Commitment to Free Will Makes Individuals Ignore the Underlying Causes of Crime

Attentiveness to the ways in which such factors as social deprivation influence crime undoubtedly varies across persons. Most of us are open to the possibility that biological and environmental factors have at least some causal role to play in human behavior. Some might even share the view of mental health experts and criminologists that human behavior is substantially influenced by external factors. Thorough-going naturalists, of course, are persuaded that factors like biology and environment fully determine behavior. While there is controversy about the precise causal mechanisms of determination, there is general agreement amongst naturalists that factors we lack direct control over fully determine human conduct.

Nevertheless, significant portions of the population have a strong commitment to metaphysical free will and are prone to ignore the causal relevance of other factors in crime. As the studies discussed in Part III reveal, subjects resist portrayals of the criminal as driven by socio-biological circumstance and tend to espouse a view of human behavior widely inconsistent with the view of criminologists and mental health experts.¹¹⁶ This folk tendency appears to have something to do with an exaggerated conception of the role of free will in human behavior. In

¹¹⁶ See *supra* Part III.B.

one study that gave participants a choice to explain criminal conduct either in terms of free will or as caused by external factors, 32% of 800 participants stated that criminal conduct is 100% due to free will rather than due to factors like hard social conditions (the mean response attributed 76% of the causal responsibility to the agent's will).¹¹⁷ One need not endorse a thoroughgoing naturalism to recognize that such results reflect folk beliefs that are widely inconsistent with what we know already about human psychology – it is well-established that our thoughts, desires, and behavior are heavily influenced by factors like biology and social circumstance.

While the studies merely reflect a correlation between the folk belief in free will and a resistance to contextual explanations of crime, the claim, here, is that the two are directly linked – their commitment to metaphysically robust free will makes individuals less likely to acknowledge the effects of hard social conditions and biological predisposition on criminal behavior. Recall that on the metaphysically robust conception of free will, we act freely when our actions stem from a faculty that is undetermined by past events and natural laws. This conception of an offender's behavior as spontaneously emanating from an undetermined faculty inside of him represents a very different way of thinking than one that tries to relate the person's actions to his context.¹¹⁸ In terms of affixing causal responsibility, the significance we confer on the actor's undetermined "will" bears directly on the perceived significance of the actor's situation, and vice versa – the more situational factors are emphasized the less an undetermined will can be.

¹¹⁷ Tygart, *supra* note 90.

¹¹⁸ On a similar point, see Daniel Glaser, *Criminality Theories and Behavioral Images*, 61 AM. J. SOC'Y 433, 434-5 (1956).

As a result, an exaggerated belief that a person's "evil will" is fully responsible for his behavior offers adjudicators a convenient theoretic license to ignore the ways in which other factors contribute to crime. For those sufficiently committed to metaphysically robust free will, data that bears on the general likelihood of criminality in a population of offenders affected by adverse circumstances becomes irrelevant and uninteresting as criminals are imagined to retain a freedom to choose otherwise no matter how constraining their circumstances happen to be. While someone who believes in free will *may* take hard social conditions and other contextual factors seriously, the evidence suggests that people, generally, over-estimate the role of free will in human behavior. Instead of acknowledging the effects of contextual factors, people prefer to think of an agent's evil will as primarily responsible for his or her conduct. As Nietzsche observes, "freedom of will" is used to "absolve God, the world, ancestors, chance, and society" from responsibility for human misbehavior.¹¹⁹

We have at last arrived at a satisfactory conclusion as to why individuals tend to be harsher the more committed they are to the existence of free will. A robust belief in free will makes individuals less likely to attend to contextual causes of crime. The more they privilege free will over contextual factors in explanations of criminal behavior, the less attentive they are to arguments for mitigation that appeal to the effects of contextual factors on criminal behavior. In other words, the folk view of human agency veils moral considerations that undermine our standing to exact retribution, considerations that once appreciated would lead to more restrained sentencing.

¹¹⁹ Friedrich Nietzsche, *BEYOND GOOD AND EVIL* 28 (Walter Kaufmann ed., Vintage Books 1st ed. 1966) (1886).

The revisionary potential of modern science thus lies in its ability to challenge the folk view of human agency. As more people come to see the deterministic underpinnings of human behavior and engage in the sort of reflection that makes vivid the effects of contextual factors on human misconduct, we will, as a society, become more empathetic in our treatment of criminals. The next and final Part enlarges on this final point - the real corrective power of modern science derives from increasingly illustrative demonstrations of the fact that an “evil will” is not the only, or even the usual, causal basis for criminal behavior.

Part V. Modern Science as a Corrective Force

The popular conception of the criminal actor is distorted and morally distorting. More often than not the offender is perceived as “free and autonomous,” with little regard given to the role of such factors as social deprivation and mental defect. This unrealistic conception of criminal agency generates a moral blind spot; citizens fail to appreciate the complicitous role of the social order and the unfair burdens imposed on criminals – appreciations that would make them less punitive. The popular punitive instinct, uninhibited by moral inferences that depend on a realistic appraisal of human behaviour, is given legal effect by way of the moral convictions of judges, jurors, and legislators. The likely result is a sentencing regime that falls short of the ideals of retributive proportionality and empathetic criminal justice.

The remedy does not have to be a wide spread rejection of “free will.” While an exaggerated belief in metaphysically robust freedom seems to be at the root of the problem, the moral blind-spot can be remedied without having to persuade individuals of determinism’s truth. As long as more people begin to see that free will could not be the exclusive or even most

substantial driver of criminal behaviour, we will, as a society, become more attentive to the effects of factors like poverty and mental defect on an individual's propensity to behave badly.

The fact that a wide-ranging renunciation of free will is not the only solution to the problem diminishes an objection that might otherwise be more of a concern. The worry might be raised that more accurate beliefs about the causal underpinnings of human behaviour could result in worse moral adjudication. In particular, if people embrace "incompatibilism" in response to finding out that human behaviour is substantially influenced by factors we lack control over – a thesis that effectively absolves criminals of moral responsibility for their actions – there would appear to be a risk that the criminal justice system will end up not punishing criminals enough.

The possibility that incompatibilism will be widely embraced fails to be a serious concern. As is explained shortly, it seems unlikely that developments in science could persuade people to become full-fledged determinists. The far more likely scenario is that by providing vivid demonstrations of the effects of natural factors on criminal behaviour, science will make the situational basis of human behaviour more accessible to the general public and those charged with making sentencing decisions. Individuals will become more trusting of deterministic explanation without giving up on the possibility of free will entirely. This change will be enough to make them sensitive to the moral considerations that have been emphasized. At any rate, the evidence suggests that even if people reject the possibility of free will altogether, they are unlikely to become under-punishing incompatibilists. Studies indicate that while determinists punish less harshly, they continue to hold criminals morally responsible.¹²⁰ The critic who thinks

¹²⁰ See generally Nichols & Knobe, *supra* note 80; *infra* Part III.B.

that more accurate beliefs about human agency result in worse moral adjudication bears the burden of specifying the faulty inferences that would lead to defective sentencing.¹²¹

Neuroscience, in combination with behavioural genetics and sociology, can be an important corrective force in this context. One possibility is that the public, impressed with the growing successes of modern biological science, will become increasingly accepting of its materialist and deterministic theoretical underpinnings. Those who accept the scientific conception of the human, having rejected metaphysically suspect free will, will be less biased against arguments for mitigation that appeal to the role of contextual factors in causing bad behaviour. This moral improvement will in turn be manifested in the decisions of discretionary actors in the legal system. A second possibility, one that seems more likely, is that modern science will show with increasing specificity and clarity that contextual factors are greater contributors to bad behaviour than we tended to think.¹²² The general public when they encounter such results will tend to become more sensitive to such factors in assessing the criminal responsibility of those who behave badly. Even if they do not altogether give up on their belief in free will, individuals will grant it less significance in their theories of human behaviour, which will in turn diminish their susceptibility to the fundamental attribution error.¹²³ This will have a significant effect on the legal system as it aligns the behaviour of discretionary actors in the sentencing context more closely with the dictates of justice.

¹²¹ It is also worth emphasizing that the American criminal justice system is one of the harshest in the world. *See, e.g., James Q Whitman, A Plea Against Retribution*, 7 BUFF. CRIM. L. R. 85, 86 (2004) (on the striking harshness of the United States when compared with other developed nations). There appears to be relative consensus that some restraint would be a good thing for criminal justice in America. *Id* at 88. The evidence reviewed in Part II highlights some striking examples of patently disproportionate sentencing. An embrace of determinism, to the extent that it undercuts the impulse to punish, would likely bring the decisions of sentencing actors in the criminal justice system closer in line with the dictates of justice.

¹²² Thanks to Gideon Yaffe for highlighting the differences between these two possibilities.

¹²³ People might adopt a more sophisticated version of libertarianism, which gives less central a role to free will in explanations of human behavior, and acknowledges that factors other than free will play a causal role.

The second of the two long-term possibilities raised above seems especially promising in light of recent developments in the labs and courtrooms.¹²⁴ As a case study, consider the recognition by courts that a particular variant in the gene for monoamine oxidase A (“MAOA”), a protein that plays an important role in the brain, when combined with adverse environmental stimuli like childhood maltreatment, warrants mitigation in sentencing.¹²⁵ It has been argued that this particular claim of genetic predisposition to crime is especially believable in part due to advances in our understanding of the neurobiological mechanisms by which the MAOA variant confers risk: “it is linked to a neuro-transmitted system and functional difference in brains areas known to be involved in anger production and control.”¹²⁶ Correlations between the genotype and convictions for violent crime have been known since 2002.¹²⁷ But by providing causal explanations and data on mechanism, neuroscience has made the claim of genetic predisposition more plausible.¹²⁸ Indeed, one way in which modern science can push society to take such explanations of criminal behaviour more seriously is by fostering a causal understanding of exactly how biological and environmental factors predispose individuals to crime.

Scholars have observed that the mitigating force of certain mental-impairments along with the effects of poverty, marginalization, and substance abuse are under-recognized or, worse, ignored by sanction-setting legislators and by our criminal law doctrines.¹²⁹ The laws

¹²⁴ See, e.g., Baum, *supra* note 16 (discussing two US cases in which sentences were reduced on grounds of genetic predisposition); Barbara Hagerty, *Can your genes make you murder?* NATIONAL PUBLIC RADIO (July 1, 2010), <http://www.npr.org/templates/story/story.php?storyId=128043329> (noting that the jury in *State v. Waldroup* took into account evidence of genetic predisposition and childhood abuse to reduce charge from 1st degree murder to voluntary manslaughter).

¹²⁵ Baum, *supra* note 16.

¹²⁶ *Id* at 18.

¹²⁷ *Id* at 6 (describing the studies).

¹²⁸ *Id* at 18 (observing that knowledge of neurological mechanism makes the MAOA predisposition claim more believable).

¹²⁹ See Benjamin L. Berger, *Mental Disorder and the Instability of Blame in Criminal Law*, in *RETHINKING CRIMINAL LAW THEORY: NEW CANADIAN PERSPECTIVES IN THE PHILOSOPHY OF DOMESTIC*,

insensitivity does not appear to be driven by an insufficiency of data showing, for example, that various kinds of congenital disorders strongly predispose individuals to crime and ought to bear on their culpability.¹³⁰ As the neurobiological sciences provide greater specificity on the mechanisms of predisposition, sentencing actors will be less able to justify ignoring the mitigating character of such factors. Modern biological science will force us to think long and hard about our traditional intransigence in the face of facts that militate for mitigation and punitive restraint.

While reformists wait for the gradual change in people's attitudes, they can make more immediate and targeted demands for change. Reformists can reasonably argue that rule-drafters should set sentences with an awareness of the free will bias. When deciding whether neuroimaging results would be more prejudicial than probative if allowed into courtrooms, judges should consider the positive de-biasing effect the studies might have on the jury. One could argue that prosecutors should be prevented from prejudicing the jury with claims like "the defendant's crime stems entirely from his evil makeup," claims that exploit and aggravate the effects of the attribution error.¹³¹ Other de-biasing strategies might be pursued via jury instruction.

TRANSNATIONAL, AND INTERNATIONAL CRIMINAL LAQ 117 (Francois T. Renaud & James Stribopoulos eds., 2011); Watson, *supra* note 109; Kaye, *supra*, note 34, at 421-23; discussion *supra* note 115. *See generally* David L. Bazelon, *The Morality of the Criminal Law*, 49 S. CAL. L. REV. 385, 389 (1976) (describing cases that illustrate the way in which situational factors like social deprivation and mental defect reduce the offender's moral culpability, and observing that these factors are under-recognized in American sentencing).

¹³⁰ *See, e.g.*, Berger, *supra*, note 129 (discussing evidence of the predisposing effects of FASD and other disorders); Kaye, *supra* note 34, at 396-98, 411 n.205 (noting the law's reluctance to acknowledge the mitigating effect of social deprivation); Amanda R. Evansburg, "But Your Honor, It's In His Genes" *The Case for Genetic Impairments as Grounds for a Downward Departure Under the Federal Sentencing Guidelines*, 38 AM. CRIM. L.REV. 1565 (2001).

¹³¹ *See* Haney, *supra* note 99.

While it is difficult to assess the degree to which reformist aspirations might in the end be realised, the primary focus of this Article has been to redeem the reformist agenda. The argument has aimed at vindicating the basic reformist thesis that the scientific/bio-deterministic worldview is in tension with the way we currently punish and ought to be marshalled toward attempts at reforming criminal law for the better. It has hopefully presented a way of thinking about the reformist position that is not vulnerable to the old objections – that reformism wrongly reads metaphysical content into criminal law doctrine, or is animated by a radical and suspect moral thesis about the justificatory principles of punishment, one that denies the possibility of deserved punishment altogether.

CONCLUSION

Do problematic assumptions about free will influence criminal law and sentencing? This Article answers in the affirmative, and does so in a way that avoids the vulnerabilities of traditional reformist critiques. The criminal justice system defers to key actors in the sentencing process on outcome-controlling moral judgments. The relevant judgments about proportionality and mitigation in sentencing cannot be reached without reference to the adjudicator's own understanding of human agency. The evidence suggests that a "free will" based worldview biases adjudicators in the direction of harsher punishment by causing them to be unreasonably resistant to arguments for mitigation that appeal to the role of contextual factors in causing bad behaviour. By ignoring contextual explanations for why criminals behave the way they do, individuals remain blind to the failures of the social order and the unfair disadvantages incurred by marginalized criminals – considerations that undermine our standing to exact retribution. It is in these situations that the radical reformist thesis is most relevant – modern science, by

challenging folk theories of human behavior, will foster a greater consciousness of the contextual causes of crime, and in turn have a corrective and morally auspicious effect on the sentencing decisions of discretionary actors.