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**Neuroscience, Normativity, and
Retributivism**

Michael S. Pardo
Dennis Patterson

THE FUTURE OF PUNISHMENT
(Thomas Nadelhoffer, ed., Oxford University Press, forthcoming)

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Neuroscience, Normativity, and Retributivism

Michael S. Pardo^{*}

Dennis Patterson^{**}

Theories of criminal punishment provide accounts that purport to legitimate and justify criminal punishment. The theoretical project takes as its impetus that criminal punishment is a form of state-sponsored violence; under the auspices of criminal punishment, states inflict pain and suffering on citizens—depriving them of life, liberty, or property to which they would otherwise be entitled—for their transgressions of the criminal law. What would make such coercive actions by the state legitimate? When is the exercise of this power justified? Finally, how much punishment is justified in particular circumstances? Much ink has been spilled trying to answer these difficult questions. Although a variety of different theories and approaches have been proposed throughout the ages, modern criminal-law theory centers around two groups of punishment theories.¹ Broadly construed, theories in the first group purport to justify

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¹ In an insightful and clarifying recent article, Mitchell Berman observes that despite the

rich diversity of justificatory theories, including deterrence (Bentham and Beccaria), reform (Plato), retribution (Kant), annulment (Hegel), and denunciation (Durkheim), a striking feature of twentieth century punishment theory . . . has been the steady and generally successful pressure to fold this seeming multiplicity of justifications into a simple dichotomy of justifications that at least appears to mirror the fundamental organizing distinction in moral theory between consequentialism and deontology.

punishment on “consequentialist” grounds. Despite important differences among them, theories in this group rely on the beneficial social consequences that are claimed to flow from criminal punishment (primarily, reduced future crime) because of its deterrent, incapacitating, or rehabilitating effects.² Broadly construed, theories in the second group purport to justify punishment on “retributivist” grounds. Theories in this group, despite important differences among them, rely on the notion that criminal offenders somehow *deserve* punishment proportionate to their transgressions of the criminal law.³

Although debates rage on within each side and across the consequentialist-retributivist divide, most theorists acknowledge some role for both types of considerations. The United States Supreme Court has also explained that, as a matter of constitutional law, the federal and state governments may as a general matter rely on multiple justifications for punishment.⁴ Empirical work suggests that subjects support both rationales for punishment (although particular punishment decisions may be more consistent with retributivist rationales).⁵ We do

Mitchell Berman, Two Types of Retributivism, in *The Philosophical Foundations of the Criminal Law* 3 (Duff & Green, eds, forthcoming), available at: <http://ssrn.com/abstract=1592546>.

² The classic deterrence-based accounts are Cesare Baccaria, *On Crimes and Punishments* (1764) and Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation* (1789). For an overview of more recent consequentialist rationales, see Anthony Duff, *Legal Punishment*, *Stanford Encyclopedia of Philosophy* (2008), available at: <http://plato.stanford.edu/entries/legal-punishment/>.

³ The classic retributive account is Kant’s. See Immanuel Kant, *The Metaphysics of Morals* 1797 (Gregor trans. 1996). See also Berman, *supra* note 1, at 6 (referring to the “desert claim” as the “core retributivist contention” that “punishment is justified by the offender’s ill-desert.”) For overviews, see Duff, *supra* note 2; David Wood, *Punishment: Nonconsequentialism*, 5/6 *Philosophy Compass* (2010), available at <http://ssrn.com/abstract=1659453>.

⁴ See *Harmelin v. Michigan*, 501 U.S. 957, 1001 (1991) (Kennedy, J., concurring) (“the Eight Amendment does not mandate adoption of any one penological theory . . . The federal and state criminal systems have accorded different weights at different times to penological goals of retribution, deterrence, incapacitation, and rehabilitation.”) See also *Ewing v. California*, 538 U.S. 11 (2003).

⁵ See, e.g., Kevin M. Carlsmith, John M. Darley & Paul H. Robinson, *Why Do We Punish? Deterrence and Just Desserts as Motives for Punishment*, 83 *Journal of Personality and Social Psychology* 284, 294 (2002) (noting that “[w]hen asked about just deserts and deterrence, participants generally supported both perspectives” and “[p]eople seemed to support these two philosophies and generally to have a positive attitude toward both”).

not wish to take sides or offer new arguments in favor of retributivist or consequentialist theories of criminal punishment. Rather, we examine the relationship between neuroscience and this theoretical project, focusing in particular on arguments and inferences regarding criminal punishment drawn from current neuroscientific data.

In an influential article, Joshua Greene and Jonathan Cohen challenge retributivism by arguing that neuroscientific data will undermine retributivist intuitions *indirectly* by undermining *directly* the “free will” intuitions on which, they claim, retributivist theories depend.⁶ This argument requires some unpacking before we can evaluate its underlying assumptions. Before we explore the details of this argument, however, it is important to understand more generally how the argument relates to current criminal-law doctrine. The criminal law presupposes “folk psychological” explanations of human action, and neuroscientific data may provide inductive empirical evidence that is relevant for deciding issues within that conceptual framework.⁷ A variety of proposals have suggested ways in which neuroscience may provide evidence for deciding issues within this current conceptual framework, including issues regarding *mens rea*, insanity, competence, voluntariness, and lie detection. Importantly, however, the inferences and conclusions drawn from the neuroscientific data must not run afoul of the conceptual contours of that framework in order to contribute meaningfully to these doctrinal issues.⁸

⁶ Joshua Greene & Jonathan Cohen, For Law, Neuroscience Changes Nothing and Everything, in *Law and the Brain* (Seki & Goodenough eds, 2006).

⁷ See Stephen J. Morse, Criminal Responsibility and the Disappearing Person, 28 *Cardozo Law Review* 2545, 2253-54 (2007) (“The law’s view of the person is thus the so-called ‘folk psychological’ model: a conscious (and potentially self-conscious) creature capable of practical reason, an agent who forms and acts on intentions that are the product of the person’s desires and beliefs. We are the sort of creatures that can act for and respond to reasons.”).

⁸ For a discussion, see Michael S. Pardo & Dennis Patterson, *Philosophical Foundations of Law and Neuroscience*, 2010 *U. Illinois L. Rev.* 1211 (2010).

At the theoretical level of criminal punishment, however, neuroscience may offer a deeper and more radical challenge to the entire doctrinal framework of the criminal law by undermining the assumptions on which it is based and, with it, theories of punishment that depend on such assumptions. This is the nature of Greene and Cohen's challenge. It concedes that the current doctrinal edifice of the criminal law remains largely unshaken by neuroscience. Instead, they argue that important aspects of the doctrinal edifice depend upon a retributivist foundation—which in turn rests upon a non-deterministic, free-will foundation—and thus, so the argument goes, if neuroscience can bring down the non-deterministic, free-will foundation it will also bring down retributivism and the legal doctrine built upon it. We discuss several problems with this argument, and we argue that if neuroscience has the potential to cause the changes Greene and Cohen predict, it will do so by fostering a number of unwarranted and problematic inferences and ought to be resisted.

I. A Brief Taxonomy of Theories of Criminal Punishment

Theories of criminal punishment are primarily normative accounts that purport to answer the question of when the state is justified in subjecting citizens (and non-citizens) to criminal punishment, and derivatively, how much punishment is justified when punishment in general is warranted.⁹ In addition to this normative project, theories of punishment may also be directed at answering explanatory questions as to why the state would engage in acts of criminal punishment—whether it is justified or not—and why it would choose particular forms and amounts of punishment.¹⁰ There is also a distinct conceptual project of delineating the scope of what constitutes punishment.¹¹

⁹ See Duff, *supra* note 2; Berman, *supra* note 1.

¹⁰ See John Bronsteen, *Retribution's Role*, 84 *Indiana L.J.* 1129 (2009).

One dominant strategy for answering such questions focuses on the future consequences of punishment. According to this “forward looking” strategy, the perceived beneficial consequences include deterring others not punished from committing similar acts in the future, and preventing (or reducing the likelihood) that those punished will commit future crimes by rehabilitating, incapacitating, or deterring them specifically.¹² Under this consequentialist strategy, punishment is not an end in itself but serves an instrumental value in bringing about the social good of reducing future crime; punishment may be justified to the extent the positive social benefits it brings about exceed the harms it causes.¹³ Moreover, specifics about whom should be punished, how, and how much, may be justified under this strategy based on whatever would bring about the socially optimal or desirable level of benefits to costs. In addition to these normative issues, a consequentialist account may also explain why the state would choose to exercise its right to punish (assuming it is justified in doing so) and would undergo the expense of doing so (including expenses to those punished and citizens generally).¹⁴

The second dominant strategy for answering such questions focuses on the acts (together with the mental states and surrounding circumstances) of those subjected to criminal punishment. Under this “backward looking” strategy, actions by those who violate the dictates of the criminal law are such that the actor may deserve punishment and ought to be punished (and conversely those

¹¹ See H.L.A. Hart, *Punishment and Responsibility* (1968).

¹² Although the criteria for justifying punishment under this strategy are “forward looking” (i.e., consequences), the strategy also employs a number of “backward looking” considerations in assessing likely consequences. These include, most importantly, the details of the particular criminal act and its surrounding circumstances, as well as other criminal acts committed by the defendant in the past.

¹³ See Berman, *supra* note 1.

¹⁴ See Bronsteen, *supra* note 10.

who do not violate the criminal law do not deserve punishment and should not be punished), regardless of whether any future beneficial consequences will follow.¹⁵ For this strategy, it is the fact that the guilty defendant deserves criminal punishment that justifies the state's actions.¹⁶ Retributivists may cash out exactly how desert justifies punishment in a variety of ways. For instance, punishment of those who deserve it may have some innate, intrinsic worth.¹⁷ The desert aspect may also serve a particular type of instrumental value that justifies punishment—for example, it may serve to “cancel out,” denounce the criminal acts, or express the community's disapproval of the various acts.¹⁸ Or, under a more “pure” form of retributivism, the desert aspect may justify punishment regardless of whether punishment itself has any intrinsic worth or serves any other intrinsic value.¹⁹ Turning to the specifics of punishment, the retributivist strategy purports to justify whom should be punished, how, and how much by appealing to whether the person is in fact guilty and, if so, the amount of punishment that is proportional to their culpability or ill-desert.²⁰ In addition to these normative issues, a retributivist account may also explain why the state chooses to punish and chooses to do so in the ways that it does. Under this explanatory account, such punishment tracks the intuitions of citizens about what is just and may also reduce acts of vengeance and reciprocal violence.²¹

¹⁵ See Berman, *supra* note 1.

¹⁶ *Id.*

¹⁷ See Michael Moore, *Placing Blame* (2007).

¹⁸ Berman, *supra* note 1, at 9.

¹⁹ *Id.* at 16-19.

²⁰ Under retributivist theories, “proportionality” may be cashed out in various ways. See Alice Ristroph, *Proportionality as a Principle of Limited Government*, 55 *Duke L.J.* 263, 279-84 (2005).

²¹ See Paul H. Robinson & John M. Darley, *Intuitions of Justice: Implication for Criminal Law and Justice Policy*, 81 *S. Cal. L. Rev.* (2007).

The initial distinction between these two strategies raises a number of additional issues. First, the considerations at issue under each strategy may play a variety of theoretical roles. They may each be taken to provide one consideration in whether punishment is justified in a particular context.²² Under such a view, the criteria of any particular strategy may be neither necessary nor sufficient to justify punishment. Or each strategy may be taken to provide a *necessary* condition for justifying punishment.²³ Or each may be taken to provide a *sufficient* condition for justifying punishment.²⁴ Second, the strategies may also combine and interact in various ways. For example, each may provide a “constraint” on the other that would defeat otherwise legitimate punishment. Punishment that would produce good consequences, all things considered, may be illegitimate if it punishes someone more than they deserve. Punishing someone as much as they deserve may be illegitimate if it would otherwise lead to terrible social consequences.²⁵ Finally, although the two strategies lend themselves to the familiar distinction in moral theory between utilitarian and deontological theories, they are conceptually distinct.²⁶ One may believe that deontological considerations ground moral theory or make particular moral judgments right or

²² Under this view, the strategies are consistent with each other.

²³ For example, satisfying the criterion of desert may be required to justify punishment, but it alone may not be sufficient.

²⁴ For example, deterrence may provide a sufficient condition for punishment under some conceptions, but it may not be necessary.

²⁵ Under such conceptions, each strategy may provide “defeasible” conditions for justifying punishment. For example, desert might be taken to justify punishment unless it can be shown that the punishment will lead to more crime. For further details on different possible ways to conceptualize retributivism, see Berman, *supra* note 1; Larry Alexander & Kimberly Kessler Ferzan, with Stephen Morse, *Crime and Culpability: A Theory of Criminal Law* (2009) (distinguishing “mild,” “moderate,” and “strong retributivism”); Kenneth W. Simons, *Retributivism Refined—or Run Amok?*, 77 U. Chi. L. Rev. (2010) (book review essay); Michael T. Cahill, *Punishment Pluralism*, in *Retributivism: Essays on Theory and Policy* (White ed., forthcoming), available at <http://papers.ssrn.com/sol3/abstract=1705682>.

²⁶ Larry Alexander & Michael Moore, *Deontological Ethics*, Stanford Encyclopedia of Philosophy (2007), available at <http://plato.stanford.edu/entries/ethics-deontological/>; Berman, *supra* note 1, at 4-5.

wrong (true or false)²⁷ and also think (consistently) that the state is not justified in punishing for retributivist reasons.²⁸ Similarly, one may believe that utilitarian considerations ground moral theory or particular moral judgments and also think (consistently) that the state is justified in engaging in criminal punishment for retributivist reasons.²⁹

As our language is meant to suggest, we do not intend to take sides in these debates or to argue that any particular theories in these categories succeed or fail on their own terms. Our aim in this brief section has been simply to explicate the theoretical issues sufficiently in order to properly assess the challenge to retributivism advanced by Greene and Cohen. We now turn to that challenge.

II. Neuroscience and Intuitions about Punishment

Greene and Cohen focus on the neural activity of criminals while committing criminal acts, and, indeed, the neural activity underlying all human action. Through such focus, Greene and Cohen argue, “[n]euroscience will challenge and ultimately reshape our intuitive sense(s) of justice” and with it retributivism.³⁰

²⁷ This point holds regardless of whether moral truths are understood in realist or anti-realist terms.

²⁸ See Alexander & Moore, *supra* note 26 (“Retributivism has two aspects: (1) it requires that the innocent not be punished, and (2) it requires that the guilty be punished. One could be a deontologist generally and yet deny that morality has either of these requirements.”).

²⁹ This may be one normative implication of Paul Robinson’s work on “empirical desert.” See Paul H. Robinson, *Empirical Desert*, in *Criminal Law Conversations* 29 (Robinson, Garvey & Ferzan eds., 2009). See also Alexander & Moore, *supra* note 26 (“a retributivist might alternatively cast these two states of affairs (the guilty getting punished and the innocent not getting punished) as two intrinsic goods, to be traded off both against each other (as in burden of proof allocation) and against other values. Some retributivists urge the latter as a kind of explicitly ‘consequentialist retributivism.’”).

³⁰ Greene & Cohen, *supra* note 6, at 208.

Before turning to the details of their argument, Greene and Cohen outline familiar³¹ philosophical positions regarding free will (or freedom of action) and physical determinism, on which their argument will rely. “Determinism” is the position that the world in its current state is “completely determined by (1) the laws of physics and (2) past states of the world,” and that future states will be likewise so determined.³² “Free will,” as they define it, “requires the ability to do otherwise.”³³ “Compatibilism” is the position that determinism, if true, is compatible with human free will.³⁴ “Incompatibilism” is the position that determinism and free will are incompatible and thus both cannot be true. Within incompatibilism, “hard determinism” recognizes the incompatibility and denies free will; by contrast, “libertarianism” recognizes the incompatibility but denies determinism and accepts free will.³⁵

³¹ Although familiar, these notions and their implications are not always clear.

³² Id. at 210 (“Given a set of prior conditions in the universe and a set of physical laws that completely govern the way the universe evolves, there is only one way that things can actually proceed.”) Greene and Cohen acknowledge the existence of a certain amount of indeterminacy or randomness in the universe based on quantum effects, but they point out that this amendment adds little to the debate about how free will can emerge within the physical universe. Id. at 211. See also Peter van Inwagen, *How to Think about the Problem of Free Will*, 12 *Ethics* 327, 330 (2008) (“Determinism is the thesis that the past and the laws of nature together determine, at every moment, a unique future.”); David Lewis, *Are We Free to Break the Laws?*, 47 *Theoria* 112 (1981).

³³ Id. at 210. See also van Inwagen, *supra* note 32, at 329 (“The free-will thesis is that we are sometimes in the following position with respect to a contemplated future act: we simultaneously have both the following abilities: the ability to perform the act and the ability to refrain from performing the act (This entails that we *have been* in the following position: for something we did do, we were at some point prior to our doing it able to refrain from doing it, able not to do it.)”)

³⁴ Greene & Cohen, *supra* note 6, at 211. See also van Inwagen, *supra* note 32, at 330 (“Compatibilism is the thesis that determinism and the free-will thesis could both be true.”) Note that the compatibilist need not take a stand on the empirical question of whether determinism is actually true. Rather, assuming the truth of determinism, the compatibilist is committed to the possibility that some human actions will be consistent with free will. Likewise, an incompatibilist also need not take a stand on the truth of determinism but may instead endorse the conditional position that, if determinism is true, then free will does not exist.

³⁵ Greene & Cohen, *supra* note 6, at 211-12. Note also that one may reject free will for reasons independent from the issue of determinism. In other words, one could reject hard determinism and also reject free will.

Turning now to the details of their argument, the first step is to link the legitimacy of law with whether it “adequately reflect[s] the moral intuitions and commitments of society.”³⁶ They note that while “current legal doctrine” (including criminal law and sentencing) may be “officially compatibilist,” the intuitions on which the doctrine is based are “incompatibilist” and “libertarian.”³⁷ Indeed, they contend that within “modern criminal law” there has been a “long, tense marriage” between “compatibilist legal principles” and “libertarian moral intuitions.”³⁸ Neuroscience will “probably render the marriage unworkable” by undermining the moral intuitions: “if neuroscience can change those intuitions, then neuroscience can change the law.”³⁹

The tension between legal doctrine and underlying moral intuitions is particularly acute with criminal punishment based upon retributivist principles. Retributivism and the doctrine it supports depend on notions of moral responsibility and “the intuitive idea that we legitimately

³⁶ Id. at 213.

³⁷ Id. at 208. Given their preference for empirical data over philosophical arguments, it is curious how little empirical support Greene and Cohen provide for the claim that criminal law doctrine is based on libertarian intuitions. They rely on two sources that, for different reasons, raise the possibility that brain damage (one source) or brain development in juveniles (the other source) may be relevant to criminal responsibility. See id at 213-17. As an empirical matter, however, non-legal actors appear to be “compatibilist” in their moral intuitions about particular cases. See Eddy Nahmias, Stephen Morris, Thomas Nadelhoffer & Jason Turner, Surveying Freedom: Folk Intuitions and Free Will and Moral Responsibility, 18 Philosophical Psychology 561 (2005). Moreover, legal doctrine in this area does not appear to depend on explicit or tacit libertarian assumptions. See Stephen J. Morse, The Non-Problem of Free Will in Forensic Psychiatry and Psychology, 25 Behavioral Science & the Law 203 (2007); Peter Westen, Getting the Fly Out of the Bottle: The False Problem of Free Will and Determinism, 8 Buffalo Criminal L. Rev. 599 (2005). If Greene and Cohen are intent on debunking libertarian presuppositions in law, then perhaps a better target would be the doctrine in criminal procedure regarding the voluntariness of confessions and *Miranda* warnings, not criminal responsibility writ large. See Ronald J. Allen, *Miranda*’s Hollow Core, 100 Northwestern U. L. Rev. 71 (2006).

³⁸ Greene & Cohen, supra note 6, at 215.

³⁹ Id. at 215, 213.

punish to give people what they deserve based on their past actions.”⁴⁰ Both “retributivism” and “moral responsibility,” they contend, are incompatibilist, libertarian notions that rely on some kind of “magical mental causation”⁴¹ within a “folk psychological system” of explaining human action.⁴² The “folk psychological system deals with unseen features of minds: beliefs, desires, intentions, etc.”⁴³ A “crucial, if not the defining feature” of a “mind” and its mental states (“beliefs, desires, intentions, etc.”) is “that it is an uncaused causer.”⁴⁴ They contend that retributivism depends on moral blameworthiness⁴⁵ and that moral blameworthiness depends on the “folk psychological system” and its “crucial . . . defining feature” of minds and mental states as uncaused causers. As Greene and Cohen put it, “folk psychology is the gateway to moral evaluation”⁴⁶ and “[s]eeing something as an uncaused causer is a necessary but not sufficient condition for seeing something as a moral agent.”⁴⁷

The problem, as they see it, is that “hard determinism is mostly correct,” and the “folk psychological system” based on “uncaused causation” is “an illusion.”⁴⁸ The notions of free

⁴⁰ Id. at 210.

⁴¹ Id. at 217.

⁴² They contrast the “folk psychological system” with the “folk physics system,” which “deals with chunks of matter that move around without purposes of their own according to the laws of intuitive physics.” Id. at 220. The two systems are different “cognitive systems” for “making sense of the behavior of objects in the world.” Id.

⁴³ Id.

⁴⁴ Id.

⁴⁵ Id. at 210.

⁴⁶ Id. at 220. They add: “To see something as morally blameworthy or praiseworthy . . . one has to first see it as ‘someone,’ that is, as having a mind.” Id.

⁴⁷ Id. at 221.

⁴⁸ Id. at 221, 209.

will, moral responsibility, blameworthiness, and retributive punishment that depend on the folk psychological system are therefore without a legitimate foundation. Neuroscience will help us to see the light by undermining “people’s common sense, libertarian conception of free will and the retributivist thinking that depends on it, both of which have been shielded by the inaccessibility of sophisticated thinking about the mind and its neural basis.”⁴⁹ Once the folk-psychological illusion has been revealed, we can “structure our society accordingly by rejecting retributivist legal principles that derive their intuitive force from this illusion.”⁵⁰

How exactly will neuroscience do this? It will do so, they predict, by revealing the “mechanical nature of human action,” along with the “when,” “where,” and “how,” of the “mechanical processes that cause behavior.”⁵¹ As they acknowledge, this is not a new conclusion: “[s]cientifically minded philosophers have been saying this ad nauseam.”⁵² But the neuroscience will reveal this mechanical nature in a way that “bypasses complicated [philosophical] arguments,” for it is one thing to hold your ground in the face of a “general, philosophical argument” but “quite another to hold your ground when your opponent can make detailed predictions about how these mechanical processes work, complete with images of the brain structures involved and equations that describe their functions.”⁵³

⁴⁹ Id. at 208.

⁵⁰ Id. at 209.

⁵¹ Id. at 217.

⁵² Id. at 214.

⁵³ Id. at 217.

To illustrate how this might work, they present the following hypothetical. Imagine a group of scientists who create an individual (“Mr. Puppet”) who engages in criminal activity. At Mr. Puppet’s trial, the lead scientist explains his relationship to Mr. Puppet as follows:

I designed him. I carefully selected every gene in his body and carefully scripted every significant event in his life so that he would become precisely what he is today. I selected his mother knowing that she would let him cry for hours and hours before picking him up. I carefully selected each of his relatives, teachers, friends, enemies, etc. and told them exactly what to say to him and how to treat him.⁵⁴

According to Greene and Cohen, Mr. Puppet is guilty according to the law if he was rational at the time of his actions, which, they assume, he was. However, they conclude that given the circumstances of his creation “intuitively, this is not fair.”⁵⁵ It is not fair, they contend, because “his beliefs and desires were rigged by external forces, and that is why, intuitively he deserves our pity more than our moral condemnation.”⁵⁶ What neuroscience will reveal—without the need for recourse to philosophical argument—is that all criminal defendants (and indeed all humans) are like Mr. Puppet in the relevant respects. Although not designed by scientists, our beliefs, desires, and “rational” actions are all “rigged by external forces” beyond our control (some combination of genes, history, culture, and perhaps randomness). If Mr. Puppet is not morally responsible, then no one else is either.

⁵⁴ Id. at 216.

⁵⁵ Id. at 216.

⁵⁶ Id. at 216.

Neuroscience will reveal the mechanical nature of our actions with examples like the following:

Imagine, for example, watching a film of your brain choosing between soup and salad. The analysis software highlights the neurons pushing for soup in red and the neurons pushing for salad in blue. You zoom in and slow down the film, allowing yourself to trace the cause-and effect relationships between individual neurons—the mind’s clockwork revealed in arbitrary detail. You find the tipping-point moment at which the blue neurons in your prefrontal cortex out-fire the red neurons, seizing control of your pre-motor cortex and causing you to say, “I will have the salad, please.”⁵⁷

What goes for the soup-or-salad choice, also goes for the choice of whether to murder, rape, assault, or steal.

Greene and Cohen do not see these neuro-revelations as the end of criminal punishment, however. They note that the “law will continue to punish misdeeds, as it must for practical reasons,”⁵⁸ and that “if we are lucky” our retributivist reasons for punishment will give way to consequentialists reasons,⁵⁹ because “consequentialist approaches to punishment remain viable in

⁵⁷ Id. at 218.

⁵⁸ Id. at 218. Although Greene and Cohen conclude that retributivism will be undermined, they also conclude that we will still invoke folk psychological concepts for other practical purposes (including, for example, deciding who has committed a criminal act in the first place). It is only for the special case of determining criminal punishment that we will rely on the conclusion that retributive punishment is unjustified because no one is *really* responsible. But if folk psychology is founded on an illusion and is thus an illegitimate basis on which to ground and justify criminal punishment, it is not clear why Greene and Cohen think it would be an appropriate basis for singling out people to punish in the first place.

⁵⁹ Id. at 224.

the absence of common-sense free will.”⁶⁰ Under a consequentialist punishment regime, legal doctrine may, for deterrence purposes, make many of the same distinctions it does today (for example, regarding infancy and insanity), “but the idea of distinguishing the truly, deeply guilty from those who are merely victims of neuronal circumstances will, we submit, seem pointless.”⁶¹ With rhetorical flourish, they conclude: “the law deals firmly but mercifully with individuals whose behavior is obviously beyond their control. Some day, the law may treat all convicted criminals this way. That is, humanely.”⁶²

There are a number of problems with this argument. Carefully examining each of these distinct problems will reveal how little the neuroscience of human action *tout court* bears on the normative project of justifying criminal punishment on the basis of moral blameworthiness or desert. Each problem by itself is sufficient to raise doubts about the conclusions Greene and Cohen draw regarding retributivism; collectively they illustrate why their conclusions ought to be rejected.

The first problem with the argument is the assumption that the intuitions of most people necessarily answer the normative questions of whether criminal punishment is justified or how it ought to be distributed. Although lay intuitions may be relevant to reform, and some agreement between punishment and lay intuitions may be *necessary* for the legitimacy of punishment, accord with the intuitions of most people is not *sufficient* to justify punishment decisions. It is possible for widely shared intuitions about what is just punishment to be mistaken. Thus, even if

⁶⁰ Id. at 209.

⁶¹ Id. at 218.

⁶² Id. at 224.

neuroscience were to cause a significant shift away retributive intuitions (as they predict),⁶³ it simply begs the question to assume that this shift would lead to more just (or more unjust) punishment decisions. The key issue is whether neuroscience will contribute evidence that provides epistemic support for arguments concerning determinism, compatibilism, moral blameworthiness, and just punishment.

The second problem with their argument is that the neuroscientific evidence that they envision would not provide this epistemic support. As Greene and Cohen appear to concede with their dismissal of “complicated [philosophical] arguments,”⁶⁴ neuroscience adds nothing new to extant conceptual arguments for or against compatibilism, incompatibilism, or hard determinism.⁶⁵ If this is so, and the presence of neuroscientific information causes people to form and hold new beliefs about these positions, then the neuroscience is persuading people for psychological reasons other than the epistemic support it provides. As may be the case in other contexts, the presence of neuroscientific information may cause people systematically to draw faulty or unsupported inferences rather than true or justified ones.⁶⁶ In other words, the very

⁶³ For preliminary empirical support for the idea that exposure to deterministic ideas may reduce punishment for retributivist reasons in certain circumstances, see Azim F. Shariff, Joshua D. Greene & Jonathan W. Schooler, *His Brain Made Him Do It: Encouraging a Mechanistic Worldview Reduces Punishment* (forthcoming). In other circumstances, however, accepting deterministic thinking may cause more, not less, punishment. For example, consider current practices of indefinite “civil commitment” of convicted sex offenders after they have completed their prison sentences because of fears of recidivism. The assumption that getting rid of retributivism will reduce punishment neglects the constraining or limiting effects retributivist thinking may provide.

⁶⁴ See Greene & Cohen, *supra* note 6, at 217.

⁶⁵ Indeed, both the “Mr. Puppet” and “soup/ salad” examples are consistent with a variety of different positions on these issues.

⁶⁶ The causal role played by neuroscientific evidence in drawing inferential conclusions may not be a justificatory role. See Jessica R. Gurley & David K. Marcus, *The Effects of Neuroimaging and Brain Injury on Insanity Defenses*, 26 *Behavioral Sciences & the Law* 85 (2008); David P. McCabe & Alan D. Castel, *Seeing is Believing: The Effect of Brain Images on Judgments of Scientific Reasoning*, 107 *Cognition* 343 (2008); Deena Skolnick Weisberg et al., *The Seductive Allure of Neuroscience Explanations*, 20 *J. Cognitive Neuroscience* 470 (2008).

effects that Greene and Cohen predict may prove to be widespread cognitive mistakes. The neuroscientific information may cause people to draw problematic (or philosophically dubious) inferences regarding issues relating to free will, determinism, and criminal responsibility.⁶⁷ Perhaps Greene and Cohen would respond that this causal effect is at least pushing people toward the correct positions, albeit for the wrong reasons. But this presupposes that retributivism depends necessarily on libertarianism (for reasons unrelated to neuroscience). This takes us to a third problem with their argument.

The third problem is that their presupposition is mistaken. It is not the case that retributivism depends necessarily on a metaphysically problematic version of libertarian incompatibilism. 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.⁶⁸ If people act for reasons—more generally, if they act on the basis of their beliefs, desires, and other mental states—then we can blame or praise their actions (in light of their mental states).⁶⁹ Indeed, in their appeal to

Whether the inferences are justified or not will depend on other criteria (including philosophical and conceptual arguments) beyond what caused them.

⁶⁷ For a recent argument exposing some of these problematic inferences, see Saul Smilansky, *Hard Determinism and Punishment: A Practical Reductio*, 30 *Law & Philosophy* 353 (2011).

⁶⁸ See John Martin Fischer & Mark Ravizza, *Responsibility and Control: A Theory of Moral Responsibility* (1999). Rational control does not imply “uncaused causation.” It implies that people have the ability and the opportunity to act in accord with their mental states. For a discussion that develops these points, see Anthony Kenny, *Freewill and Responsibility* 32 (1978).

⁶⁹ This does not assume that actors are always conscious of their mental states or that mental states necessarily precede actions. In some cases, there may be no unique mental state that may be distinguished from the action that manifests the mental state (e.g., a want, knowledge, or an intention).

consequentialist justifications for punishment based on deterrence, Greene and Cohen appear to concede this type of responsiveness to reason⁷⁰: deterrence works precisely by affecting the practical rationality of potential offenders, by giving them a reason to refrain from criminal activity that (ideally) outweighs their reasons for criminal activity. Sufficient control over one's actions in light of one's practical rationality is sufficient to ground moral desert, regardless of whether the same actions may be explained in purely physical (i.e., non-mental) terms. In other words, one can coherently be a compatibilist and a retributivist, a combination that is consistent with current law.⁷¹

We first explicate this position in general terms and then illustrate it with Greene and Cohen's example of Mr. Puppet. Greene and Cohen assume that retributivism depends on "uncaused causation" because, if determinism is true, then agents could not have done otherwise and are thus not subject to moral evaluation.⁷² Confusion arises because in discussions of whether an agent could have done otherwise, can act or refrain from acting, or has the power to act or not, the terms "could," "can," and "power" are ambiguous. As Anthony Kenny explains, these terms may be referring to one of four different notions: (1) *natural powers* (e.g., the ability of water to freeze) in which physical conditions may be sufficient for their instantiation; (2)

⁷⁰ Other aspects of their argument, however, may imply that this sort of reason-responsiveness is an illusion because mental states may not exist or may be epiphenomenal. We explore this tension in their argument below.

⁷¹ To suppose otherwise would be a mistake, regardless of how many people think so, and regardless of what neuroscience shows. Rather than causing people to abandon retributivism and a libertarian conception of free will, perhaps increased neuroscientific knowledge will instead cause people to abandon confused views about free will and its relationship with responsibility. An important role for philosophy in this endeavor will be to aid in integrating increased knowledge of the brain coherently into the conceptual schemes we use to explain human behavior and the world.

⁷² They could not have done otherwise because their actions are all "rigged by external forces" beyond their control. Id. at 216.

abilities that depend for their exercise on an agent's wanting to exercise them; (3) *opportunities* to exercise one's abilities (e.g., one cannot ride a bicycle if there are no bicycles around); and (4) the presence of both an *ability* and an *opportunity* to exercise it. The fourth sense is the one that is relevant to moral blame and praise: agents who have the ability and the opportunity to act differently, but do not, are properly the subject of moral evaluation.⁷³ A key issue is thus whether this conception is consistent with determinism. Greene and Cohen assume it is not and that neuroscience will illustrate this inconsistency. We disagree with both points.

The idea that people possess the ability and the opportunity to do otherwise is consistent with determinism.⁷⁴ How can ability and opportunity be consistent with determinism? Consider first, ability. Possessing an ability (e.g., to ride a bicycle) depends on whether one satisfies the criteria for possessing the ability. These criteria include successfully exercising this ability when one wants to (and has the opportunity to) and refraining when one does not want to (and has the opportunity to refrain). Such criteria can be fulfilled even if one does not exercise the ability on the particular occasion in question. Second, consider opportunity. One has an opportunity to act (or not to act) if conditions external to the person are not forcing or preventing the exercise of the ability on a particular occasion. But, are an agent's brain states forcing him to act one way and preventing him from acting another (are they an "external force rigging his behavior") and, thus, depriving him of the opportunity to do otherwise? Not necessarily. We presume that if an agent had wanted to do something different (e.g., to ride a bicycle or not), then his brain states also would have been different. It would be a different story if his brain states caused him to ride a

⁷³ See note 68 *supra*.

⁷⁴ See Kenny, *supra* note 68, at 34 ("it does not follow from determinism that agents always lack the opportunity and ability to do otherwise than they do. Consequently it does not follow from determinism that it is unfair to hold people responsible for their actions.")

bicycle (or not) when he wanted to do the contrary. In such circumstances, there would be a breakdown of the type of rational control on which criminal responsibility depends.

The example of Mr. Puppet will help to illustrate these general points. Suppose Mr. Puppet has robbed a bank. Let's assume determinism is true and that we must decide whether to hold Mr. Puppet responsible for his actions. Assume further than Mr. Puppet is responsible only if he acted freely in robbing the bank, in the sense that he had the ability and the opportunity to not rob the bank. We ask him why he did so and he says, "I wanted the money." We might say the money (or his wanting the money) caused him to rob the bank, but surely this would not negate moral blame.⁷⁵ Presumably, Mr. Puppet had the ability to refrain from robbing the bank, in the sense that his mental states (his beliefs and desires) played some causal role in his conduct and he was responsive to reasons for and against his conduct at the time of his actions.⁷⁶ His ability to act or not in robbing the bank was thus distinct from someone sleepwalking or insane at the time. If, for example, Mr. Puppet were to learn that the police were waiting inside the bank, we presume that he would respond to this information and (given his beliefs and desires to have the money and not go to jail) abandon his plan to rob the bank—thus exercising this ability. By contrast, a sleepwalker or an insane person may not have the ability to respond to this information in a similar manner. Possessing an ability does not require exercising it whenever

⁷⁵ Causation, even abnormal causation, does not necessarily equal excuse. See Morse, *supra* note 7. Moreover, the wanting need not be a distinct event that precedes robbing the bank; it may be manifested in the robbing itself.

⁷⁶ This is based on the assumptions by Greene and Cohen that Mr. Puppet: "is as rational as other criminals and, yes, it was his desires and beliefs that produced his actions." *Id.* at 216. They also raise the possibility of defining "rationality" in neurocognitive rather than behavioral terms. *Id.* at 224 n. 3. But this would either be changing the subject (i.e., we would no longer be talking about what we currently mean by rationality) or incoherent as an explanation of rationality as currently conceived. People, not brains, behave rationally (or not). It is an instance of the "mereological fallacy" (i.e., mistakenly ascribing attributes to parts that make sense only when ascribed to the whole) to assume rationality may refer to states of the brain. See M.R. Bennett & P.M.S. Hacker, *Philosophical Foundations of Neuroscience* (2003).

possible, so even though Mr. Puppet did not exercise it in the deterministic world in which he robs the bank, this does not mean that he lacked the ability to do otherwise.⁷⁷

But did Mr. Puppet have an opportunity to do otherwise? In an important sense—yes. No external forces were coercing Mr. Puppet when he acted.⁷⁸ We can also assume that if Mr. Puppet did not want the money, his brain states would be different from his brain states when he wanted the money and robbed the bank and, thus, he would have acted differently.⁷⁹ Therefore, whatever Mr. Puppet’s neurological and other physical states are, it is not case that if Mr. Puppet did not want to rob the bank, these physical states would cause him to do so anyway or deprive him of the opportunity to adhere to the law. Once again, compare Mr. Puppet with a person who cannot exercise this control. Suppose a person cannot bring her actions to conform to her desires, goals, plans, and intentions, or, for a variety of reasons, cannot control her bodily

⁷⁷ Mr. Puppet had the ability to refrain from robbing the bank if he could exercise that ability when he wanted to (and when there is an opportunity to do so).

⁷⁸ Although, under some formulations of the hypothetical, we might have grounds for inferring that the scientists who designed Mr. Puppet coerced his behavior. Some type of coercion by third parties is typically what people mean by the claim that one’s action was not free. See Nahmias et al., *supra* note 37; van Inwagen, *supra* note 32, at 329 (“[‘Free will’s’] non-philosophical uses are pretty much confined to the phrase ‘of his/her own free will’ which means ‘uncoerced.’”)

⁷⁹ Similarly, if one had wanted soup rather than salad in Greene and Cohen’s previous example, we assume that one’s neurons would have been different. To suppose otherwise, Greene and Cohen would have to defend much stronger claims than they do: namely, that (1) there is a one-to-one correspondence between brain states and particular mental states, and (2) the relationships between various mental states and between mental states and actions are governed by the same physical laws that govern brain states (or are reducible to those laws). They do not defend either claims, cf. Greene & Cohen, *supra* note 6, at 225 (“we do not wish to imply that neuroscience will inevitably put us in a position to predict any given action based on a neurological examination”), and neither claim necessarily follows from determinism. Plausible positions that reject either claim are consistent with physical determinism. See Donald Davidson, *Mental Events*, in *Essays on Actions and Events* 207 (2001); Richard Rorty, *The Brain as Hardware, Culture as Software*, 47 *Inquiry* 219, 231 (2004). Stronger claims may be implied by their claim that folk psychology is founded on an illusion, but these claims deny rather explain the causal role of mental states. We turn to this aspect of the argument below.

movements.⁸⁰ It is precisely in such cases that we withhold judgments of moral blame—and indeed often do not even consider such movements to be “actions” at all—and the criminal law withholds punishment.

The consistency between moral judgment and determinism becomes even clearer when focusing on acts of moral praise. Suppose that, instead of a criminal act, Mr. Puppet commits an act of heroic bravery or kindness—for example, sacrificing himself in some way to save a stranger. Does his heroic or kind act cease to be morally praiseworthy if it takes place in a deterministic physical world and he is the product of his genes and upbringing? We think not. As with moral blame, what matters is whether Mr. Puppet can act for reasons and can exercise control over his actions on the basis of those reasons. Did he have the ability and opportunity to do otherwise and act voluntarily in performing this praiseworthy act? Contrast this with someone whose bodily movements were not within that person’s rational control. For example, if someone in a state of epileptic seizure or while fainting engages in bodily movements that turn out to somehow save a third party, has the person acted heroically or bravely? Do they deserve moral praise? Have they acted at all? As with moral blame, we think the distinction here is plain as well.⁸¹ Mr. Puppet deserves praise for his morally good acts, along with any other praiseworthy accomplishments, and blame for morally bad acts, when he had the ability and opportunity to do otherwise.

⁸⁰ Examples of the latter might include some cases of “alien hand” syndrome or “utilization behavior.” See Iftah Biran et al., *The Alien Hand Syndrome: What Makes the Alien Hand Alien?* 23 *Cognitive Neuropsychology* 563 (2006).

⁸¹ We also doubt that most people would be persuaded by neuroscience to think otherwise, but this is an empirical question, perhaps one for “experimental philosophy.” Similar to the “Knobe effect” with regard to ascriptions of intentions, see Joshua Knobe, *Intentional Actions and Side Effects in Ordinary Language*, 63 *Analysis* 190 (2003), subjects might distinguish between good acts and bad acts for reasons other than the relationship between determinism and free will.

To suppose moral praise or blame require uncaused causation is to miss (or misconstrue) the normativity in human action. Our normative judgments about human actions are not inconsistent with explanations that involve physical action; they require, at a minimum, that our bodily movements be *human actions* and not mere bodily movements—that is, that they are explainable based on the actor’s mental states⁸²—and that these actions meet or fail to meet various moral standards or criteria, not that they be the product “uncaused causation.” Greene and Cohen deny normativity at this level, however, along with the distinctions we have been drawing with Mr. Puppet, by arguing that they are based on the “illusion” of the folk psychological system.

This leads to a fourth problem with their argument: it implies untenable claims about folk psychology. Neither determinism in general nor neuroscience in particular undermines folk psychology in the ways they presuppose. Recall that, for Greene and Cohen, (1) moral evaluation depends on folk psychological explanations of human behavior, (2) folk psychological explanations depend on the notions of mind and mental states (i.e., beliefs, desires, and intentions), and (3) mind and mental states depend on “uncaused causation.” But the latter is an illusion. This implies that the notions of mind and mental states under this system are likewise illusory, which, for purposes of their argument, is what consequently leaves moral evaluation without a legitimate foundation. Although Greene and Cohen do not explicitly endorse the claim that mental states are non-existent (or, alternatively, are epiphenomenal),⁸³ this implication appears to follow from their claim that the “crucial, if not the defining feature” of

⁸² See G.E.M. Anscombe, *Intention* (1957).

⁸³ Indeed, they sometimes appear to endorse the causal power of mental states. See, e.g., note 76.

mind and mental states is “uncaused causation.” Moreover, this implication is necessary to undermine moral evaluation. If moral evaluation depends on folk psychological explanations generally, and mental states exist and do causal work, then folk psychology is not illusory and provides a legitimate foundation for moral evaluation. In other words, to undermine moral evaluation in the ways they suppose, neuroscience would need to undermine the folk psychological system more generally.

If the argument by Greene and Cohen depends on this stronger implication about mental states, then it faces additional difficulties.⁸⁴ It is important to be clear about the aspect of their argument linking moral evaluation to folk psychology more generally. We can reconstruct this thread as follows: (1) retributivist punishment depends on moral evaluation; (2) moral evaluation requires that people punished had some control over their actions; (3) to have such control they must have been able to act or refrain from acting; (4) the ability to act or refrain from acting requires that their mental states played a causal role in regulating their behavior; (5) but mental states do not exist or they do no causal work⁸⁵; (6) thus people have no control over their actions; (7) thus retributive punishment is unjustified. Neuroscience enters the picture in support of premise (5) by illustrating that behavior is causally determined by physical states (including brain states). But this does not follow. Mental states may exist and play a causal role while also having underlying neurological correlates. Thus, the simple fact that mental states

⁸⁴ We note that the other four problems that we explicate in our critique do not depend on this implication. Thus, readers who disagree that this implication follows are free to accept our other arguments.

⁸⁵ This aspect of the argument does not necessarily depend on a notion of “uncaused causation.” Rather, we contend that premise (5) is implied by the fact that mind, mental states, and folk psychology (as conceived by Greene and Cohen) all depend on uncaused causation. If the latter does not exist, then neither do the former (as least as they conceive of them). Notice also that if Greene and Cohen are not committed to premise (5), then, for the reasons given above, agents would have the requisite control over their actions and moral evaluation would follow.

have accompanying brain states that are part of the physical universe and subject to its law does not render the former illusory or epiphenomenal. Moreover, as an empirical matter, some mental states (e.g., intentions) do appear to play a causal role in a manner that would be impossible if folk psychology generally were an “illusion.”⁸⁶

Moreover, reflect for a moment on what it would mean for folk psychology generally to be an illusion (i.e., that there are no such things as beliefs, desires, wants, fears, knowledge, intentions, or plans). One obvious implication is that there is no difference between us (and Mr. Puppet) and someone engaged in bodily movements caused by a seizure or conditions beyond their “rational” control. A second implication is that psychological explanations would be false, and there would be nothing real (or nothing that affects behavior) for psychology to explain. A third implication is that human action would indeed cease to be “human” or “action,” at least as we currently conceive of these notions. Thus, if the argument by Greene and Cohen depends implicitly on these more radical claims about folk psychology, then this provides a *reductio ad absurdum* for their argument.⁸⁷

⁸⁶ For an overview of some of the relevant literature, see Peter M. Gollwitzer & Paschal Sheeran, Implementation Intentions and Goal Achievement: A Meta-Analysis of Effects and Processes, 38 *Advances in Experimental Social Psychology* 69 (2006). For a discussion of the relevance of these studies to debates about free will, see Alfred R. Mele, *Effective Intentions: the Power of Conscious Will* (2009). See also Mario Beauregard, Mind Really Does Matter: Evidence from Neuroimaging Studies of Emotional Self-Regulation, Psychotherapy, and Placebo Effect, 81 *Progress in Neurobiology* 218 (2007).

⁸⁷ Notice also how self-defeating this is as a challenge to *retributivism* and as a defense of *consequentialist* criminal punishment. Recall, they argue that we will still punish for practical reasons, for example, to deter future crime. Well, why? Do we *want* to deter crime? Do we *believe* or *know* punishment will deter crime? Will we therefore *choose* certain forms of punishment over others? Notice also that consequentialist justifications for punishment also involve folk psychological concepts; deterrence works by affecting the practical reasoning of potential criminals. Do potential criminals *believe* punishment will follow if they commit crime; do they not *want* to be punished; and therefore will they *choose* to not commit crimes? This aspect of their argument presupposes the existence of these entities. We concur with Anthony Kenny that “[a] legal system which took no account of states of mind would be as chimeric as it would be abhorrent.” Kenny, *supra* note 68, at 93.

Finally, there is a fifth problem with their argument. Even if they are right in their predictions; even if people are persuaded based on neuroscience to believe in hard determinism; even if they therefore conclude that their folk psychological system for explaining human behavior is based on an illusion; and even if they therefore abandon retributivism as a basis for justifying punishment; Greene and Cohen are wrong to suppose that we would be “lucky” and punishment would necessarily be more “humane.” Although some recent and interesting experimental work by Greene and colleagues suggests that subjects recommended less punishment when abandoning retributivist reasons for punishment,⁸⁸ a brief history of actual criminal-sentencing practices in the United States over the last thirty years suggests the converse to be true. Indeed, when the United States Supreme Court upheld prison sentences of “25 years to life” and “50 years to life” for stealing golf clubs and shoplifting videotapes, respectively (both “three strikes” cases), it did not justify its decision based on notions of desert but rather on other penological purposes such as deterrence and incapacitation.⁸⁹ In addition to “three strikes” laws, abandoning retributivist rationales for punishment in favor of deterrence, incapacitation, and general crime control has paved the way for harsh sentences for drug crimes, prosecuting juveniles as adults, strict liability crimes, proposals to abolish the insanity defense, and the felony-murder rule.⁹⁰ The absence of retributivist constraints also allows for the indefinite “civil commitment” of criminals after the completion of their prison sentences.⁹¹ Indeed, more widespread acceptance of the idea that criminal offenders cannot stop and are “determined” to

⁸⁸ See Shariff, Greene & Schooler, *supra* note 63.

⁸⁹ *Ewing v. California*, 538 U.S. 11 (2003); *Lockyer v. Andrade*, 538 U.S. 63 (2003).

⁹⁰ See Paul H. Robinson, Owen D. Jones & Robert Kurzban, Realism, Punishment, and Reform, 77 U. Chi. L. Rev. 1611, 1630 (2010).

⁹¹ See *Kansas v. Hendricks*, 521 U.S. 346 (1997).

continue their criminal behavior does not appear to us to be a recipe for more compassionate and humane punishment. Moreover, psychologically persuasive but epistemically dubious neuroscience may only exacerbate rather than alleviate this problem.⁹² We share what we believe to be the sentiment of Greene and Cohen that criminal punishment ought to be more humane, but we do not believe that the way to get there is by denying our shared humanity. A crucial part of that shared humanity is that our behavior may be explained and evaluated in the language of folk psychology.

* * *

We close with a final point. Imagine a group of open-minded policymakers faced with the task of constructing a justified system of legal punishment; they decide to listen to and take seriously the arguments of Greene and Cohen regarding retributivism, hard determinism, and neuroscience. At the end of the day, they could evaluate the various claims and the reasons for them; deliberate about the various avenues open to them and the benefits and costs of each; and then choose a course of action that they think is justified or more justified than the alternatives. Or they could simply sit back and wait for their neurons to make the decision for them. Or they could flip a coin. For the normative project of justifying criminal punishment, these distinctions matter a great deal to the issue of whether the criminal punishment that followed would be justified and legitimate.⁹³ From the perspective of Greene and Cohen, however, these differences ultimately do not matter (just as they do not matter at the level of criminal

⁹² This prediction was made recently by Richard Sherwin. See Richard K. Sherwin, *Law's Screen Life: Criminal Predators and What to Do About Them*, in *Imaging Legality: Where Law Meets Popular Culture* (Sarat ed., 2011).

⁹³ And it appears to matter for Greene and Cohen, who apparently think that punishment should proceed for consequentialist reasons and not for retributivist reasons.

responsibility). If no one is *really* blameworthy or praiseworthy, justified or unjustified, then the same goes for lawmakers who decide how and when to distribute punishment. If it is just causally determined neuronal activity all the way down, and if the folk psychological explanations of punishment behavior are founded on an illusion, then for purposes of moral evaluation it does not matter *why* anyone chooses to engage in criminal punishment or *how* they go about doing so.⁹⁴ The same goes for theorists engaged in the normative project of critiquing and defending possible policies regarding the distribution of criminal punishment. If so, then one wonders why they bothered to make the argument.

⁹⁴ See also Joshua D. Greene, The Secret Joke of Kant's Soul, in *Moral Psychology*, Vol. 3: Emotion, Disease, and Development (Sinnott-Armstrong ed., 2007), in which Greene argues against retributivist punishment decisions and in favor of consequentialist punishment decisions on the ground that the former involve more "emotional" cognitive processes and the latter more "rational" ones.