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Morse, Mind, and Mental Causation

Michael S. Pardo
Dennis Patterson

CRIMINAL LAW AND PHILOSOPHY (*forthcoming*)

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Morse, Mind, and Mental Causation

Michael S. Pardo *

Dennis Patterson **

ABSTRACT: Stephen Morse's illuminating scholarship on law and neuroscience relies on a "folk psychological" account of human behavior in order to defend the law's foundations for ascribing legal responsibility. The heart of Morse's account is the notion of "mental state causation," in which mental states (e.g., beliefs, desires, and intentions) cause behavior. Morse argues that causation of this sort is necessary to support legal responsibility. We challenge this claim. First, we discuss problems with the conception of mental causation on which Morse appears to rely. Second, we present an alternative account to explain the link between mental states, reasons, and actions (the "rational-teleological" account). We argue that the alternative account avoids the conceptual problems that arise for Morse's conception of mental causation and that it also undergirds ascriptions of legal responsibility. If the alternative succeeds, then Morse's conception of "mental state causation" is not necessary to support legal responsibility.

The relationship between the mind and the brain raises perennial philosophical questions and provides numerous avenues for scientific research. The conceptual and the empirical issues that emerge from this relationship are exceedingly complex. Add to this complexity the law—

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with its own complex doctrinal requirements, conceptual issues, and normative and empirical standards—and you have a recipe for manifold confusions. Stephen Morse’s illuminating scholarship on the many issues that emerge from the various interactions among law, the mind, mental attributes, psychology, and the brain sciences has done much to elucidate the possible ways forward and to caution against dead ends. In integrating law and science, and in dispelling confusions along the way, Morse manifests three distinct types of expertise: the scientist’s attention to empirical details, the philosopher’s concern for conceptual clarity, and the lawyer’s appreciation of the nuances and realities of the legal world.

The heart of Morse’s discussions involves presenting and defending the law’s reliance on a “folk psychological” conception of human behavior.¹ According to this conception, people act for reasons, and their actions may be explained, justified, or critiqued on the basis of their reasons for action. These “folk psychological” explanations make use of everyday, commonsense notions such as “desires, beliefs, intentions, willings and plans.”² Relying on the “folk psychology” conception, Morse largely defends the law’s conceptual foundations for ascribing legal responsibility, and in doing so he steers the law’s doctrinal regime past two potential pitfalls. The first is the idea that the mental states that form the basis for the folk-

¹ We focus primarily on Morse’s article, “Lost in Translation?: An Essay on Law and Neuroscience,” in Michael Freeman (ed.), *Law and Neuroscience: Current Legal Issues Volume 13* (Oxford and New York: Oxford University Press, 2011), p. 529. Morse also defends this conception in other recent works, including, for example: “Mental Disorder and Criminal Law,” *J. Crim. & Criminology* 101 (2011): p. 885; “Avoiding Irrational Neurolaw Exuberance: A Plea for Modesty,” *Mercer L. Rev.* 62 (2011): p. 837; and “Determinism and the Death of Folk Psychology: Two Challenges to Responsibility from Neuroscience,” *Minn. J.L. Sci. & Tech.* 9 (2008): p. 1.

² Morse, “Lost in Translation,” *supra* note 1, at 530. The term “folk psychology” is used in a number of different ways in the philosophical literature. Morse’s use typically refers to the ability of persons to engage in practical reasoning. The capacity for practical rationality underlies not only Morse’s general account of responsibility but also his account of excusing conditions such as insanity (which he has forcefully argued are best conceived in terms of rationality defects or impairments). For an overview, see Stephen J. Morse, “Against Control Tests for Criminal Responsibility,” in Paul H. Robinson, Stephen P. Garvey & Kimberly Kessler Ferzan (eds.), *Criminal Law Conversations* (Oxford and New York: Oxford University Press, 2009), p. 449.

psychological conception are either non-existent, or alternatively, exist but are epiphenomenal.³ Although he appears open to the possibility that such eliminative or reductionist projects could perhaps be carried out in the future, he rejects these ideas on the basis of current evidence and arguments, or any that are likely to be heard any time soon. He concludes that neither eliminative materialism nor charges of epiphenomenalism undermine ascriptions of legal responsibility.⁴ The second potential pitfall is the idea that law's reliance on folk psychology commits the law to implausible metaphysical theses. In other words, does law's framework for ascribing responsibility depend necessarily on Cartesian dualism? If so, too bad for the law, so the argument goes. Morse rejects this implication (and thus this pitfall) by explaining that law's folk-psychological conception is consistent with a rejection of substance dualism (Cartesianism) and is consistent with an acceptance of a thoroughgoing materialism. One can coherently endorse both the folk-psychological conception and the idea that any mental attributes the law considers to be relevant depend necessarily on the brain.⁵

The heart of Morse's discussions of law and folk psychology concerns the notion of "mental state causation."⁶ Morse's defense of the law's conceptual framework depends on the idea that the mental states posited by the folk-psychological conception (i.e., beliefs, desires,

³ See Patricia S. Churchland, *Neurophilosophy: Toward a Unified Science of the Mind/Brain* (Cambridge, MA: The MIT Press, 1986); Paul M. Churchland, "Eliminative Materialism and the Propositional Attitudes," *J. Phil* 78 (1981): p. 67; Daniel M. Wenger, *The Illusion of Conscious Will* (Cambridge, MA: The MIT Press, 2002); Joshua Greene & Jonathan Cohen, "For Law, Neuroscience Changes Nothing and Everything," in Semir Zeki & Oliver Goodenough (eds.), *Law & the Brain* (Oxford and New York: Oxford University Press, 2006).

⁴ See Morse, "Lost in Translation," *supra* note 1.

⁵ *Id.* at 536.

⁶ *Id.* at 530.

intentions, and plans) play a causal role in producing human actions.⁷ As he explains: “The definition of folk psychology insists only that human action is in part causally explained by mental states,” and “[v]irtually all actions for which agents deserve to be praised, blamed, rewarded, or punished are the product of mental causation.”⁸ Morse relies on the foundational idea of “mental causation” to steer the law’s framework for ascribing responsibility past the twin pitfalls noted above. On the one hand, if mental states exist and play a causal role, then eliminative or reductionist claims to the contrary are false. On the other hand, if mental states play this causal role while avoiding dualist commitments, then charges of implicit Cartesianism are likewise neutralized. This is the course Morse takes: “I am simply accepting the folk-psychological view that mental states—which are fully produced by and realizable in the brain—play a genuinely causal role in explaining human behavior.”⁹ In sum, mental states are produced by and realized in the brain (they are not a distinct substance), but they nonetheless exist and play a (non-reductive) causal role, thereby avoiding the twin pitfalls that would undermine law’s framework for ascribing liability.

We agree that the twin pitfalls should be avoided and that the law’s conceptual presuppositions do in fact avoid them. Our critique is thus largely a friendly one—we endorse

⁷ The type of causation at issue in causal explanations of this type is sometimes labeled “efficient”—in order to distinguish it (in Aristotle’s schema) from “formal,” “material,” and “final/ teleological” causes. “Efficient” causal explanations of why some event occurred typically describe some other preceding event that brought about the first event (e.g., “the pins fell over because the bowling ball struck them” or “the window broke because the baseball struck it”). By contrast, “formal” explanations explain why something is so by reference to the nature or essence of the thing (e.g., “it is a triangle because it has three sides” or “he is a bachelor because he is an unmarried male”); “material” explanations refer to the material constitution of something (e.g., “it conducts electricity because it is made of copper”); and “final/ teleological” explanations refer to why something is so by reference to its purpose. For an illuminating overview, see P.M.S. Hacker, *Human Nature: The Categorical Framework* 181-98 (Oxford and New York: Oxford University Press, 2007).

⁸ *Id.*

⁹ *Id.* at 532.

Morse's general conclusions regarding the reductionist, eliminative, and dualist theses. In this Essay, we focus on some questions and challenges about the details. We raise two issues. First, we examine Morse's reliance on "mental causation." Although the idea plays a pivotal role in Morse's discussions, he does not (so far as we are aware) spell out a detailed conception of mental causation. A detailed account would posit an underlying theory of causation, explain how mental states cause physical movements, and clarify how (if mental states are fully produced by brain states) his conception avoids charges of epiphenomenalism. The idea of mental causation—and the mind more generally—implicit in Morse's discussions appears to us to resemble the account presented by Donald Davidson in its assumptions that mental states are simultaneously (1) material, (2) non-reducible, and (3) causally efficacious. Our first goal is thus to trace out Morse's commitments on these points. Second, we question whether such an account of mental causation is necessary for law to avoid the twin pitfalls. The problem is explaining how a mental event (e.g., an intention to act) can "cause" (in the sense of "efficient" causation) an action to occur. With others, we see serious problems with this account of human action. To avoid these problems, we present an alternative, rational-teleological account of what it means to explain actions in terms of mental states (or reasons).¹⁰ This account likewise avoids the twin pitfalls and undergirds legal responsibility. If the alternative succeeds, then Morse's commitments about mental causation are not *necessary* to avoid the twin pitfalls. In short, there may be conceptual space between eliminative/ reductive views, on one hand, and dualism, on the other, for alternative accounts of legal responsibility.

¹⁰ See Hacker, *supra* note 7, at 199-232; Ludwig Wittgenstein, *Philosophical Investigations* (New York: Macmillan, 1953) (G.E.M. Anscombe trans.); Severin Schroeder, "Wittgenstein," in Timothy O'Connor & Constantine Sandis (eds.), *A Companion to the Philosophy of Action* (Malden, MA and Oxford: Wiley-Blackwell, 2010); Eric Marcus, *Rational Causation* (Cambridge, MA: Harvard University Press, 2012).

Our discussion proceeds as follows. Part I explicates Morse’s views on mind and mental causation in more detail. Part II compares his views with those of Donald Davidson.¹¹ Part III presents an alternative account of the role of mental states in explaining human actions. Part IV provides an example to compare the differing accounts.

I. Morse’s Mind

According to Morse, the law presupposes “the ‘folk psychological’ view of the person and behavior.”¹² Under this view, “people are capable of acting for reasons and are capable of minimal rationality according to predominantly conventional, socially constructed standards.”¹³ Because people act for reasons, specifying their reasons allows us to explain their actions. These explanations work by identifying a person’s mental states: “a bodily movement can be in principle understood according to the person’s mental states.”¹⁴ The folk-psychological conception presupposes “human action will at least be rationalizable by mental state explanations or that it will be responsive to reasons.”¹⁵ Mental states “such as desires, beliefs, intentions, willings and plans” thus explain behavior by providing the agent’s reasons for acting. Morse gives the following example of such an explanation:

¹¹ We are not taking the position that Morse subscribes to all aspects of Davidson’s “anomalous monism.” However, we believe that Morse does embrace a key feature of Davidson’s theory—namely, that of mental-state causation (in the efficient sense). For this reason, we believe that contrasting Morse’s position with Davidson’s illuminates Morse’s view of mind.

¹² Morse, “Lost in Translation,” *supra* note 1, at 530.

¹³ *Id.* at 532.

¹⁴ *Id.* at 530.

¹⁵ *Id.*

the folk psychological explanation for why you are reading [his] paper is, roughly, that you desire to understand the relation of neuroscience to law to improve your work, you believe that reading the paper will help fulfill that desire, and thus you formed the intention to read it.¹⁶

According to the folk-psychological view, mental states *explain* action. What is the nature of these explanations? What makes them true? Under Morse's conception, the key to these explanations is causation.¹⁷ The explanations are *causal* explanations. Folk-psychological explanations provide the mental states that caused an action; an explanation is true if it identifies the mental states that actually caused an action, and it is false if the mental states it specifies did not cause the action. According to Morse, "folk psychology insists only that human action is in part causally explained by mental states."¹⁸ These causal explanations provide the foundation for legal ascriptions of responsibility: "Virtually all actions for which agents deserve to be praised, blamed, rewarded, or punished are the product of mental causation."¹⁹

Mental causation is not only important for the law's folk-psychological conception, in Morse's view it is necessary. Morse asserts: "Human behavior cannot be adequately understood if mental state causation is completely excluded or eliminated."²⁰ Moreover, Morse argues, mental states must play a "genuinely causal role" in order to avoid the first pitfall: eliminative materialism or epiphenomenalism. He explains that "[t]he law will be fundamentally challenged

¹⁶ Id.

¹⁷ When Morse uses the word "cause" or "causation," he appears to invoke the "efficient" meaning of the term. For discussion, see *supra* note 7.

¹⁸ Id.

¹⁹ Id. at 532.

²⁰ Id.

only if neuroscience or any other science can conclusively demonstrate that the law's psychology is wrong and we are not the type of creatures for whom mental states are causally effective."²¹ Fortunately for the law's current framework for ascribing legal responsibility, "neither neuroscience nor any other science has demonstrated that mental states play no independent and partial causal role."²²

In recognizing mental causation, Morse notes that this does not entail dualism. "[I]t may seem, therefore, as if law's emphasis on the importance of mental states as causing behavior is based on a pre-scientific, outmoded form of dualism, but this is not the case."²³ Rather, he maintains that mental states are "fully produced by and realizable in the brain."²⁴ Therefore, mental causation avoids the dubious metaphysical commitments associated with Cartesianism.

In sum, Morse recognizes a fundamental role for "mental state causation" and appears to endorse the following claims:

- (1) mental states exist and thus eliminative claims to the contrary are false (or at least are not supported by current evidence);
- (2) mental states make a causal difference and thus epiphenomenalism is false (or at least is unsupported by current evidence);
- (3) materialism is true (mental states are produced and realized in the brain) and substance dualism is false; and

²¹ Id. at 534.

²² Id. at 536.

²³ Id. at 536.

²⁴ Id. at 532.

(4) mental states are produced and realized in the brain, but they are not fully *reducible* to brain states (or at least the possibility of such reductionism is not supported by current evidence).²⁵

Although “mental state causation” plays a fundamental role for Morse in explaining legal ascriptions of responsibility, his discussions raise a number of questions about the precise nature of such causation and exactly why it is necessary.

II. Davidson’s Mind

The philosophical views underlying Morse’s account appear to us to closely resemble those of Donald Davidson. Within the philosophical literature, Davidson has articulated the most famous causal account linking reasons with actions.²⁶ He built on this causal account by developing a more full-fledged theory of mind known as “anomalous monism.”²⁷ Davidson’s ideas and the literature surrounding them provide resources for exploring Morse’s account in more detail. In this Part, we first outline the contours of Davidson’s position, comparing them in the process with Morse’s views (outlined in Part I). We then discuss the theoretical advantages and disadvantages of the Davidsonian position regarding mental state causation.

²⁵ Consistent with these ideas, Morse outlines the plausible “theory of mind” underlying folk psychological explanations as follows:

The plausible theory of mind that might support such explanations is thoroughly material, but non-reductive and non-dualist. It hypothesizes that all mental and behavioral activity is the causal product of lawful physical events in the brain, that mental states are real, that they are caused by lower level biological processes in the brain, that they are realized in the brain--the mind-brain--but not at the level of neurons, and that mental states can be causally efficacious.

Morse, “Determinism and the Death of Folk Psychology,” *supra* note 1, at 33. Morse’s account is consistent with non-reductive mechanistic explanations in neuroscience. See Carl F. Craver, *Explaining the Brain: Mechanisms and the Mosaic Unity of Neuroscience* (Oxford and New York: Oxford University Press, 2007).

²⁶ Donald Davidson, “Actions, Reasons, and Causes,” in *Essays on Actions and Events* (Oxford and New York: Oxford University Press, 2001), p. 3.

²⁷ Donald Davidson, “Mental Events,” in *id.*

A. Davidson and Mental Causation

Davidson endorses the following claims:

(1) Mental events exist and causally interact with physical events and other mental events. This is the same idea that Morse endorses as necessary for law's folk-psychological conception.

(2) Materialism is true. There is only one substance, and dualism is false. (Hence the "monism" in Davidson's anomalous monism.) This means that every token mental event is identical with a token physical event. This is consistent with Morse's claim that mental states are "fully produced by and realized in the brain."

(3) Physical events are governed by strict physical laws. This is known as the principle of "nomic causation," which holds that explanations linking causes and effects fall under exceptionless laws.²⁸ Morse also, we assume, endorses the general idea that physical events are governed by physical laws. There are additional (and significant) philosophical controversies about the nature of causation and these laws, but they are orthogonal to this discussion.

(4) Mental events, while playing a genuine causal role (see (1)), are not governed by physical laws, even though mental events are token-identical with physical events that are governed by such laws. For this reason, mental events are not reducible to physical events.²⁹ On this point, there is an affinity between Morse and Davidson, but there is also an important difference. For

²⁸ For a recent discussion of this aspect of Davidson's theory, see Marcus, *supra* note 10.

²⁹ There are many types of reductionist strategies. The primary types of reduction are (1) logical reduction, in which the true claims about one domain are equivalent to true claims in another domain and can be translated into the latter; (2) explanatory reduction, in which the phenomena described in one domain can be explained fully in the terms of another domain; and (3) nomic reduction, in which the laws of one domain can be derived from the laws in another domain. See Shahotra Sarkar, "Models of Reduction and Categories of Reductionism," *Synthese* 91 (1991): p. 167.

Morse, the non-reduction of the mental to the physical may just be an empirical limitation—we just have not figured out how to do it yet.³⁰ For Davidson, however, this limitation is *conceptual*. In other words, it is not just that mental events have not been reduced; it is that the mental is, in principle, irreducible. For Davidson, the irreducibility arises from the holistic nature of rational explanations:

It is a feature of physical reality that physical change can be explained by laws that connect it with other changes and conditions physically described. It is a feature of the mental that the attribution of mental phenomena must be responsible to the background of reasons, beliefs, and intentions of the individual . . . [with rational explanation] we must stand prepared, as evidence accumulates, to adjust our theory in the light of considerations of overall cogency: the constitutive ideal of rationality partly controls each phase in the evolution of what must be an evolving theory.³¹

³⁰ See Morse, “Lost in Translation,” *supra* note 1, at 543 (“The coherence of responsibility and competence doctrines and practices are safe. At least for now.”). Even if reductionism is in principle possible, there are a number of practical reasons why reductive explanations need not be a primary goal of neuroscience. As Carl Craver explains:

One difference between neuroscience and physics is that there are no laws of neuroscience comparable in scope and stability to the laws of optics and statistical mechanics. Generalizations in neuroscience are fragile, variable, and historically contingent to a far greater extent than are the gas laws or the laws of optics. A second difference is that objects in the domain of science are multiply realizable; that is, different materials, parts, or mechanisms can (and do) give rise to the same nonfundamental regularities.

Craver, *supra* note 25, at 234.

³¹ Davidson, “Mental Events,” *supra* note 27, at 222-23. W.V.O. Quine, whose naturalism is often cited to support reductionist claims about the mind and mental attributes in the neurolaw literature, also endorsed this irreducibility:

I acquiesce in what Davidson calls anomalous monism, also known as token physicalism: there is no mental substance, but there are irreducibly mental ways of grouping physical states and events. . . . the mental predicates, for all their vagueness, have long interacted with one another, engendering age-old strategies for predicting and explaining human action. They complement natural science in their incommensurable way, and are indispensable both to the social sciences and to our everyday dealings.

This potential divergence between the views of Morse and Davidson is worth highlighting in more detail. If, as Morse argues, (1) law’s folk-psychological foundation depends on (efficient) mental state causation, and (2) reductionism undermines that foundation by undermining the causal efficacy of mental states—then the Davidsonian conceptual position regarding irreducibility provides a stronger bulwark against challenges to law’s folk-psychological foundation than Morse’s stated position. Morse’s non-reductive materialism, in other words, may be strengthened by embracing a Davidsonian position regarding mental state causation.³² Such a move would inherit the theoretical advantages—but also the disadvantages—that inhere in the Davidsonian position.³³

B. Advantages and Disadvantages

The primary theoretical advantage to the Davidson conception is that it promises to make sense of the link between reasons and action. In other words, it purports to explain what it means to act for a reason. Causation provides the link. When we say that an agent performed act X for reason Y we are saying that the agent performed X because of Y, and *because of* means *caused by* (reason Y caused X).³⁴ The “reasons” in this context are the folk-psychological mental states

W.V.O. Quine, *Pursuit of Truth* (Cambridge, MA: Harvard University Press, 2d ed. 1992), p. 72.

³² See *supra* note 25.

³³ Another alternative for Morse, which we explore below, is to give up the notion that (efficient) mental state causation is necessary for law’s conceptual foundations. Other alternatives, which are outside the scope of our discussion, are (1) rejecting the assumption that reductionism undermines mental state causation, or ascriptions of responsibility more generally; (2) rejecting law’s current conceptual foundations as unjustified or incoherent, and (3) embracing dualism as the foundation for ascriptions of legal responsibility.

³⁴ Michael Moore explains that this idea—the “causal theory of action”—is a “basic tenet of folk psychology.” See Michael S. Moore, “Responsible Choices, Desert-Based Legal Institutions, and the Challenges of Contemporary Neuroscience,” *Social Phil. & Policy* 29 (2012): p. 233; Michael S. Moore, “Libet’s Challenge(s) to Responsible Agency,” in Walter Sinnott-Armstrong & Lynn Nadel (eds.), *Conscious Will and Responsibility* (Oxford and New York: Oxford University Press, 2011), p. 207 (“When I go downtown *because* I intended to go downtown, the ‘because’ is meant causally.”).

discussed above: i.e., combinations of beliefs, desires, intentions, etc.³⁵ Consider again Morse's example of why readers read his article: their desire to gain knowledge, belief the article will provide it, and intention to therefore read it. This combination provides the reader's reason for acting, and, under the Davidsonian conception, it does so by *causing* the action. The prior mental event brings about the subsequent physical event: a person's reading the article. A causal interpretation of the link between reasons and actions, Davidson argued, is correct because an agent could have several different (possibly inconsistent) reasons to act, each of which may rationalize, justify, or explain why the agent acted, but only one of those reasons may be the reason why she acted.³⁶ (She performed act X for reason Y, not reasons A and B, even if A and B would rationalize or justify action X.) According to Davidson, the causal interpretation of "she did X because of Y" provides a way of picking out the *true* folk-psychological explanation of the agent's reason for acting.

This conception also appears to avoid the twin pitfalls. Because the mental event is identical with a physical event (in Morse's words, the mental state is "fully produced by and realized in the brain"), the dualist charge is neutralized. Because the mental event appears to be doing "genuine" causal work, and it is not fully reducible to physical explanations of brain states, the radical eliminative/ reductionist charges are likewise neutralized.

Adopting this causal conception, however, raises a number of theoretical puzzles and challenges. We describe three of the more serious.

³⁵ Id.

³⁶ Davidson, "Actions, Reasons, and Causes," *supra* note 26, at 9 ("a person can have a reason for an action, and perform the action, and yet this reason not be the reason why he did it. Central to the relation between a reason and an action it explains is the idea that the agent performed the action *because* he had the reason.")

Problem 1: wayward causal chains

The first, and perhaps the most serious one, is that the Davidsonian account does not appear to adequately distinguish acting *for* a reason and acting *because of* a reason (but not *for* a reason). This is because reasons can cause actions without the agent acting for that reason. (For example, one's desire to Z may cause (i.e., be the reason for) one to tremble which may thereby cause one to Z.) Davidson's example of this phenomenon is the following:

A climber might want to rid himself of the weight and danger of holding another man on a rope, and he might know that by loosening his hold on the rope he could rid himself of the weight and danger. This belief and want might so unnerve him as to cause him to loosen his hold, and yet it might be the case that he never chose to loosen his hold, nor did he do it intentionally.³⁷

As Davidson acknowledged, these types of "wayward" causal chains fit the pattern of reasons causing (or bringing about) actions, but the folk-psychological explanations describing them are false (they do not accurately rationalize or explain the action in terms of the agent's reason for acting because the agent did not act for that reason).³⁸

This is a problem for the Davidsonian account of causation, not for accounts of legal responsibility. The law already has a mechanism for responding to wayward causal chains. In such circumstances, legal responsibility may be withheld because the person did not act

³⁷ Donald Davidson, "Freedom to Act," in *Essays on Actions and Events*, at p. 79.

³⁸ *Id.*

purposely or knowingly (e.g., in letting go of the rope).³⁹ If one adopts mental state causation as a necessary condition for legal responsibility, then one can still maintain that it is not *sufficient*.⁴⁰ Wayward causal chains are one way in which it will sometimes be insufficient. The problem for a legal theorist adopting this account, in other words, is therefore *not* an inability to explain legal responsibility. The problem is that the relied-upon account does not explain what it means *to act for a reason* in the first place. A legal theorist relying on mental state causation to explain human action is relying on an incomplete account of what it means to act for a reason (because mental states can cause actions without being the reasons for them). That other aspects of legal doctrine can neutralize this defect should not be surprising. It might mean that the law has anticipated and responded to gaps in a mental-causation account of action, and it might also mean that the law does not rely on such an account in the first place.

Problem 2: epiphenomenalism

A second problem concerns lingering doubts about epiphenomenalism. As noted above, one potential advantage to the Davidsonian account is that it gives an answer to the role played by mental states in explaining human action. It explains how they “make a difference” in action by positing that the difference they make is a causal one (in the efficient sense). Exactly how mental states can play such a causal role and not be physically reducible, however, remains a

³⁹ Under the Model Penal Code, for example, legal culpability typically depends having a mens rea of acting purposely, knowingly, recklessly, or negligently. See Model Penal Code § 2.02. The climber did not act purposely because it was not his “conscious object to engage in conduct of that nature” or “to cause such a result.” *Id.* The climber was not acting knowingly because he was not “aware that it is practically certain that his conduct will cause such a result.” *Id.* Not enough information is provided to determine recklessness or negligence; these would turn, respectively, on whether the climber disregarded a “substantial and unjustifiable risk” or should have been aware of such a risk, and whether his conduct involved a gross deviation from a reasonable standard of care. *Id.*

⁴⁰ Morse has championed the idea that causation does not necessarily equal excuse. The flipside is also true: (mental) causation does not necessarily equal responsibility.

matter of contention. This is a problem both for the Davidsonian conception and for Morse's account in his own terms. If materialism is true (as Davidson and Morse accept), and every mental event is identical with a physical event that is subject to the causal physical laws of the universe, how exactly is it that the mental event contributes to the efficient causal chain?⁴¹ This is mysterious given that the physical event itself is sufficient, given the physical covering laws. This puzzle arises equally for Davidson's conceptual irreducibility and for Morse's empirical claims about reduction. If mental states are physical states, and physical states are subject to physical laws, a more detailed account of how mental states make a genuine causal difference is required. This is so regardless of whether Morse embraces the stronger Davidsonian position.

Problem 3: first-person experiences and ascriptions of action

A third problem concerns how the causal story fits with first-person perspectives on action. If reasons (i.e., sets of beliefs, desires, and intentions) cause actions, why is it not the case that if someone knows her reasons, she cannot just sit back and wait for the action to occur? The fact that this does not occur, and that we would be shocked if it did, casts doubt on the Davidsonian conception. In discussing an example of Wittgenstein's, Peter Hacker illustrates this point clearly and provocatively:

Suppose I form the decision to pull the bell rope at five o'clock (I want to call the butler and believe that by pulling the rope I shall do so). The clock strikes five. Should I now wait patiently for my arm to go up? If my wants and beliefs can be causes of my behavior, then I should be able to sit back and let them bring about the movement of my arm. Should I, bearing in mind my antecedent decision, describe what happens with the

⁴¹ See Jaegwon Kim, "The Myth of Nonreductive Materialism," *Proceedings and Addresses of the American Philosophical Association* 63 (1989), p. 31.

words, “And see! My arm goes up when the clock strikes five”? No; the upshot is not that my arm rises, but that *I raise it*—if I act in order to get what I want. Were the causal story true, I should, at least until the novelty has worn off, be surprised that when I have such-and-such wants and beliefs, such-and-such movements eventuate.⁴²

This stark mismatch between the Davidsonian conception and our first-person perspective on action reveals another disadvantage to the former as an explanation of human action.

* * *

Each of the three issues raised above has been explored in the philosophical literature.⁴³ Our aim in this Part has not been to resolve any of them; rather, the point of our discussion has been to describe the theoretical advantages and the potential philosophical challenges facing non-reductive materialist accounts of mental state causation (similar to the one Morse appears to endorse).⁴⁴ Given the potential problems with such an account, however, we present an alternative that may both avoid these problems and similarly undergird ascriptions of responsibility.

⁴² Hacker, *supra* note 7, at p. 232.

⁴³ For an excellent overview of the philosophical issues and how they relate to ascriptions of legal responsibility, see Michael S. Moore, *Act and Crime* (Oxford and New York: Oxford University Press, 1993). *See also* Moore, “Responsible Choices,” *supra* note 34 (discussing how recent neuroscience relates to these issues).

⁴⁴ We note that efficient mental causation remains a mainstream view in the philosophy of action. For a recent overview of the debates, see Giuseppina D’Oro and Constantine Sandis (eds.), *Reasons and Causes: Causalism and Anti-Causalism in the Philosophy of Action* (Palgrave Macmillan, 2013). Moreover, as we explain above, even if the problems we discuss raise challenges for causal theories of action, they may not necessarily pose challenges for legal responsibility.

III. Rational-Teleological Explanations

Morse, like Davidson, relies on a non-reductive materialist account of mind in which mental states cause actions. Under this conception, mental states play an efficient causal role. Moreover, Morse argues that this conception is *necessary* to support the law's folk-psychological framework for ascribing legal responsibility. We do not think it is necessary. To support our claim, we discuss an alternative account of the role mental states play in ascriptions of legal responsibility. Under this second option, explanations of actions in terms of reasons are rational explanations with a teleological structure.⁴⁵ We are indifferent to whether the alternative is called “non-causal”⁴⁶ or a simply a different type of causal explanation⁴⁷; what matters is that it differs from the efficient-causation conception and that it undergirds legal responsibility.

First, let us start with the similarities. As with the efficient-causation theory, the rational-teleological framework also attempts to rationalize and understand actions by explaining the agent's action in terms of her reason for acting. Not all explanations of behavior are efficient causal explanations.⁴⁸ If we want to explain to someone why a baseball player engaged in certain movements (e.g., attempted to bunt), the explanation will make reference to the rules of baseball and strategies for scoring runs; it will not be a causal explanation of how events in the player's brain caused his physical bodily movements (although such an explanation may be

⁴⁵ See *supra* note 7.

⁴⁶ See Hacker, *supra* note 7.

⁴⁷ See Marcus, *supra* note 10 (conceptualizing teleological explanations as causal explanations). Marcus provides an excellent overview of the prominent “non-causal” theories of action that preceded and prompted Davidson's seminal article, “Actions, Reasons, and Causes.”

⁴⁸ This is critical to our alternative account of explanation of action. In our view, the core philosophical dispute is over the meaning of “explanation” and what constitutes a successful explanation in this context.

called for, and may be given, in a different setting). More generally, many explanations of actions in terms of reasons are *normative* explanations—for example, citing a rule, standard, or norm as the reason for an action. The reasons that rationalize or explain the action may also refer to what caused the person to act, but not necessarily (as we discussed in the previous Part).

Turning now to a key difference, in giving a rational explanation of an action in terms of reasons we may explain the action by giving the purpose for which it was carried out. Suppose we want to know why a baseball player moved the bat the way he did. We might explain that he did so (i.e., he bunted) *in order to* move the runner on first base to second base.⁴⁹ We have given a reason that explains his action. This explanation may be true or false.⁵⁰ He may have done so for this reason, making the explanation true. Or he may have done so for a different reason (making the explanation false.) We can further breakdown our explanation into the practical-reasoning pattern described earlier—he desired to move the runner on first base to second base, he believed bunting would be a way to do so, and thus he formed an intention to do so. In exercising this practical, rational ability, the baseball player’s action exhibits a *teleological* structure. We might describe this as a kind of causation—in which one state of affairs (moving the runner) caused another state of affairs (the player to bunt)—but it is *not* the kind of causation at work in the efficient-causation picture. It is not as if the future state of affairs (moving the runner to second base) is pulling the prior event (bunting) forward like a train engine pulling a car. It is more like the event-as-a-whole provides an explanation of its parts. We can say the

⁴⁹ Compare such an explanation with the mens rea requirement of acting “purposely” under the Model Penal Code. See *supra* note 39. The explanation of the baseball player’s conduct meets the definition of acting purposely in bunting—i.e., it was his “conscious object to engage in conduct of that nature” or “to cause such a result”—even though the explanation does not depend on efficient mental state causation. We thank an anonymous referee for pointing out this connection.

⁵⁰ In characterizing such an explanation as true, we mean that it describes a real connection between reasons and actions that provides understanding about why the world is as it is. See Marcus, *supra* note 10, at p. 166.

same thing about the previous example of someone reading Morse's article to learn about neurolaw. We can explain why someone read the article by explaining that she did so *in order to* learn about neurolaw. This explanation likewise may be true or false. Learning about neurolaw may be a teleological explanation of why someone read the article. The event-as-a-whole explains why its parts unfolded as they did.⁵¹ Unlike the efficient-causal theory, the explanation does not work by positing that one event (the mental states) brought about the next event (i.e., one domino hitting another or pulling another along).

When we have true rational-teleological explanations, we can better understand⁵² the person and her actions. We are thus in a better position to evaluate the person's conduct: whether she was acting voluntarily or not⁵³; whether the person was justified or not; and so on. As Peter Hacker explains, explanations of actions in terms of reasons are hermeneutic—they allow us to interpret the person's behavior and better understand it “ideographically rather than nomothetically.”⁵⁴ In rejecting an efficient-causation account, Hacker (in words that could have been written by Stephen Morse) continues:

⁵¹ Eric Marcus gives the following example of a rational-teleological explanation: “Dara is tasting all the desserts because she is reviewing the restaurant.” *Id.* at 8. Her reviewing the restaurant explains why she is tasting the desserts. The explanation is made true by a connection between Dara's reasons and her actions (a connection that consists in an exercise of Dara's “rational practical ability”). *Id.* But, “[w]e say that Dara was tasting all the desserts not because she later finished reviewing the restaurant but because she was, at the time of eating, engaged in the project of reviewing the restaurant. . . . In instances of teleological causation, the unfolding of an event-whole is a cause of the concurrent unfolding of its parts.” *Id.*

⁵² We would even go so far as to suggest that “understanding” of an action is the metric for evaluating the success of an explanation.

⁵³ For example, if we know the baseball player bunted in order to move the runner to second base, we know that he intended to bunt (and thus that his moving the bat was *not* a full swing that he tried to stop or the result of an involuntary twitch).

⁵⁴ Hacker, *supra* note 7, at p. 232.

Knowing his reasons for doing what he did, we may come to know what kinds of things weigh with him in his deliberations, and what kinds of considerations move him to act. We can see the extent of his rationality and the degree of his reasonableness, as well as the values for the sake of which he is prone to take action. Such explanations enable us not only to judge the agent and evaluate what he did, but also to judge his character. It enables us to understand our fellow human beings *as persons*.⁵⁵

Explanations of actions along these lines strike us as good a foundation as any for ascriptions of legal responsibility.⁵⁶ What is added by postulating an additional, efficient causal role for mental states, thereby opening up the various challenges and puzzles discussed in the previous Part?

Before turning to this question, we first point out two upsides to the rational-teleological account. First, it too avoids the twin pitfalls. It is consistent with a materialist conception of mind and does not imply substance dualism. Second, it accounts for the distinction between acting *because of* a reason and acting *for* a reason that creates problems for the Davidsonian account. The problematic situation—in which an agent engages in bodily movements *because of*

⁵⁵ Id.

⁵⁶ To avoid a potential misunderstanding, we are not advocating an increased use of character evidence regarding defendants nor that the law should ascribe responsibility on the basis of character rather than based on particular actions. As we see it, explanations of actions, under this account, remain focused on trying to assess the particular actions under existing legal categories. The reasons for the existing general ban on character evidence—i.e., that fact-finders may give the propensity evidence more weight than it deserves in inferring particular conduct and that they will punish the defendant regardless of particular conduct—apply whether one adopts an efficient-causation or rational-teleological account of action. As do the exceptions to the general ban on character evidence. On character evidence and its exceptions, see Federal Rules of Evidence 404-405, 406, 413-15, 608-609. We thank an anonymous referee for raising this issue.

certain reasons (beliefs and desires) but has not acted *for* those reasons—does not display the rational-teleological structure.⁵⁷ The person has not acted *in order to* bring about that end.⁵⁸

The primary motivation for the efficient-causal picture is the need to account for the fact that multiple reasons may rationalize an action but not be *the* reason for the action.⁵⁹ But note that there is no reason to think that just because a reason *rationalizes* an action this makes an explanation in terms of that reason true.⁶⁰ In other words, there may still be a fact of the matter as to why, or for what purpose, a person acted. The practical rationality that underlies law's ascriptions of responsibility (under both the Davidsonian and teleological accounts) is a type of ability. To engage in action is to exercise this ability. The teleological pattern that purports to explain the action may refer to a pattern of inferences the agent actually expressed or would otherwise endorse after the fact. This makes some patterns true explanations and some false. Moreover, this facticity is consistent with uncertainty (epistemic or metaphysical) in individual cases as to the actual reasons for an action, and it is consistent with the fact that the explanation a person gives or otherwise endorses (or would endorse) for his action may be defeasible.⁶¹

To illustrate how these two accounts each conceptualize the role of mental states in ascriptions of legal responsibility, we contrast them with a detailed example. What matters for our purposes is that both accounts reach the same conclusion regarding legal responsibility. If

⁵⁷ For example, the climber loosening his grip on the rope because of his desire and belief. See *supra* note 37.

⁵⁸ The climber has not acted purposely for purposes of the Model Penal Code. See *supra* note 39 and 49. A third upside is that, like the Davidsonian account, it is also consistent with compatibilist theses about free will.

⁵⁹ See *supra* note 36.

⁶⁰ Cf. Marcus, *supra* note 10, at p. 152 (“I am not aware that anyone ever held the view that to say what reason someone had to perform an action is *by itself* to explain her performance of it.”)

⁶¹ See Hacker, *supra* note 7, at p. 225, for a discussion of first-person avowals of reasons for actions.

that is so, then this supports our claim that building in an additional requirement regarding efficient causation is not necessary to support law's folk-psychological framework.

IV. An Example

In a well-known article purporting to challenge the law's "folk psychological" framework for ascribing responsibility, Joshua Greene and Jonathan Cohen present an example that, they claim, reveals why ascriptions of responsibility will come to be seen as unjustified.⁶² The example is the hypothetical case of "Mr. Puppet." In prior work, both we and Morse have pointed out several problems with the arguments of Greene and Cohen and with the inferences they draw from the example of Mr. Puppet.⁶³ Our aim is not to rehash those arguments (nor to respond directly to the analysis of Greene and Cohen). Rather, we use the example to illustrate how the efficient-causation and rational-teleological accounts each explains why Mr. Puppet should be held legally responsible for his actions.

Here is the example. 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

⁶² Greene & Cohen, *supra* note 3.

⁶³ Morse, "Determinism and the Death of Folk Psychology," *supra* note 1; Michael S. Pardo & Dennis Patterson, *Minds, Brains, and Law: The Conceptual Foundations of Law and Neuroscience* (Oxford and New York: Oxford University Press, 2013), p. 194-207.

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.⁶⁴

According to Greene and Cohen, Mr. Puppet is guilty under the law's "folk psychological" framework if he was rational at the time of his actions. They assume that he was "as rational as other criminals and, yes, it was his desires and beliefs that produced his actions." Even though Mr. Puppet's mental states produced his actions, they conclude that "intuitively, this is not fair."⁶⁵ They contend it is not fair because "his beliefs and desires were rigged by external forces, and that is why, intuitively he deserves our pity more than our moral condemnation."⁶⁶ Moreover, 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. If Mr. Puppet is not responsible, then no one else is either.

Greene and Cohen think that this example poses a challenge to the "folk psychological" framework because, they contend, that framework depends on a notion of "magical mental causation."⁶⁷ The "folk psychological system deals with unseen features of minds: beliefs, desires, intentions, etc.,"⁶⁸ and a "crucial, if not the defining feature" of mental states is that they are the product of "an uncaused causer."⁶⁹ Moreover, "[s]eeing something as an uncaused causer

⁶⁴ Greene & Cohen, *supra* note 3, at p. 216.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.* at 217.

⁶⁸ *Id.*

⁶⁹ *Id.*

is a necessary but not sufficient condition” for ascriptions of moral and legal responsibility.⁷⁰

Neuroscience, they predict, will help us to appreciate that this type of “uncaused” mental causation is an illusion and to appreciate the “mechanical processes that cause behavior”⁷¹—the mechanical processes that make us all like Mr. Puppet.

There are a number of ways to resist their conclusions. One way is to concede their points about “magical mental causation” and “uncaused causation” but endorse these notions. Someone adopting substance dualism might, for example, posit that the mind is a distinct substance, outside the causal matrix of the physical world, but that nevertheless exerts a causal influence on behavior—it is the uncaused causer. We, like Morse, reject this option. In recognizing that ascriptions of responsibility are compatible with physical determinism, however, this still leaves open the question of how best to characterize explanations of actions in terms of mental states, whether in terms of efficient causation or rational-teleological.

Return to Mr. Puppet. Suppose again that he has the requisite rationality to be held legally responsible for his conduct—he is able to engage in practical reasoning in light of his beliefs and desires, he is responsive to reasons, and so on. Now, suppose that Mr. Puppet robs someone at gunpoint on the street. Why did he do so? He wanted money. Prior to engaging in the crime, Mr. Puppet went through the following bit of practical reasoning: he desires money, he believes that the person walking toward him has money, and so he forms the intention to point a gun at the person and say, “give me your wallet.” He was not sleepwalking, he was not suffering from psychosis, he was not under duress, and no other legally recognized excusing

⁷⁰ Id. at 221.

⁷¹ Id. at 217.

conditions obtained. We think that even in a causally determined physical universe, Mr. Puppet ought to be held legally responsible for his conduct, and we think Morse would agree.⁷²

The key issue we are pressing is: why? Is it because, as the efficient-causal theory maintains, Mr. Puppet's mental states formed a link in a chain that caused Mr. Puppet's actions in the causally determined physical world—although the mental states are not *reducible* to features in the physical world? Or is it simply that we understand, given what we know, that he was acting voluntarily and why he did it (in order to get money)?⁷³ We assume that, under either conception, Mr. Puppet's brain states would be the same. We also assume that, in the counterfactual world in which his mental states were different, his brain states would be different as well. What is gained, and what is lost, in adopting the efficient-causation explanatory framework or the rational-teleological explanatory framework, if each is capable of explaining Mr. Puppet's reason for acting and each provides a basis for responsibility? We pose these questions as a challenge for Morse to the extent that he endorses an efficient-causation theory for mental states as the only way to save the law's folk-psychological framework for ascribing responsibility. One downside to this assumption by Morse that it reintroduces a mysterious notion of "mental cause" that is akin to efficient physical causation but that is somehow distinct, non-reductive, and anomalous, and that raises the other puzzles and challenges that we discussed in Part II.

⁷² Morse, "Lost in Translation," *supra* note 1, at p. 535 ("all human behavior is caused by its necessary and sufficient causes, including brain causation.").

⁷³ We are not suggesting that we ought to punish Mr. Puppet because of his bad character; rather, responsibility follows from what he did on this occasion and why he did it. See *supra* note 56. The same conclusion would follow even if Mr. Puppet were acting "out of character" in engaging in similar conduct for similar reasons.

V. Conclusion

Efficient mental causation is one way to account for the link between reasons and action, and it is a philosophically popular way to do so. But there may be other ways to account for true explanations of actions in terms of reasons. If so, then the efficient-causation account is not necessary to avoid the twin pitfalls of eliminative materialism/ reductionism, on one hand, and substance dualism, on the other, as Morse maintains. We agree with him that the twin pitfalls are to be avoided and that the law, to its credit, largely avoids them.⁷⁴ Although we share this conclusion, our aim has been to point out the deep philosophical issues and divisions lurking just below its surface regarding what it means to act for a reason.

⁷⁴ Pardo & Patterson, *supra* note 63.