Spinoza's EIp10 As a Solution to a Paradox about Rules: A New Argument from the *Short Treatise*

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1.

The tenth proposition of Spinoza's *Ethics* reads: 'Each attribute of substance must be conceived through itself.'[1] Developing and defending the argument for this single proposition, it turns out, is vital to Spinoza's philosophical project. Indeed, it's virtually impossible to overstate its importance. Spinoza and his interpreters have used EIp10 to prove central claims in his metaphysics and philosophy of mind (i.e., substance monism, mind-body parallelism, mind-body identity, and finite subject individuation).[2] It's crucial for making sense of his epistemology (i.e., Spinoza's account of knowledge and response to skepticism) and in resolving puzzles within the *Ethics* (i.e., explaining human ignorance of all but two attributes).[3] Even those who do not attribute *some* of the above claims to Spinoza need EIp10 to defend much of what they believe about Spinoza's system. This paper locates a previously unnoticed argument for this proposition in Spinoza's *Short Treatise on God, Man, and His Well Being*. There, Spinoza shows himself concerned with a powerful and underappreciated form of philosophical skepticism, one with surprising echoes in the work of his contemporary Leibniz as well as in the later Wittgenstein.[4] Spinoza's introduction of E1p10 in the *Ethics* circumvents this form of skepticism, solving the problem the *Short Treatise* envisions while also

explaining that text's argument's absence from the explicit justificatory structure of the *Ethics*.

As commonly interpreted, EIp10 expresses Spinoza's surprising claim that each attribute—that is, each fundamental way of being an independent substance—is *conceptually* and *causally* isolated from every other. Crucially, here I take *all* non-causal forms of dependence to be *conceptual*, including what contemporary philosophers call ontological or explanatory dependence. Conceptual talk, though perhaps not the most natural term for non-causal dependence relations in the contemporary context, best captures Spinoza's own usage and thus suits my purposes here. And ultimately I side with those interpreters who think Spinoza *identifies* causal and non-causal forms of dependence.[5] That said, for the two attributes Spinoza thinks humans can know,[6] Thought and Extension, as well as their modes, particular minds and bodies, EIp10 entails:

> *Barrier*: Nothing mental can be *caused by* nor *conceived through* anything physical, and nothing physical can be *caused by* nor *conceived through* anything mental.[7]

Spinoza's predecessors, principally Descartes, accept the strict *conceptual* independence of Thought and Extension, such that, in Descartes's words, 'the concept of one is not contained in the concept of another' (CSM I 298). In this paper, I assume that the *conceptual, that is, non-causal,* independence of attributes is common ground between Spinoza and his interlocutors.[8] Given this shared presupposition, Descartes's rejection of *Barrier* can be framed in two equivalent ways:

> *Interactionism*: It is not the case that every attribute is causally and conceptually independent.

Interactionism's functional upshot, for Descartes, is that that mental things (e.g., substances or modes) can *cause* physical things (e.g., substances or modes), and physical things can *cause* mental things, though of course only God, rather than any finite substance, can actually create other substances.[9] But it's also useful to see Descartes and Spinoza as disagreeing about two types of dependence relations. On this framing, the Spinozist defender of *Barrier* affirms, while the Cartesian *Interactionist* denies, the following:

Correlation: Conceptual independence entails causal independence.[10]

The heart of Spinoza's *explanation* for the causal isolation of physical and mental things, on this reading, is the absence of any sort of conceptual, non-causal dependence between the two.

Two further facts about *Barrier* make this paper's attempt to locate a textually grounded, genuinely Spinozistic argument for EIp10 essential. First, rejecting *Barrier* courts widespread inconsistency in the *Ethics*. But there is nonetheless substantial interpretive pressure, as historical and recent debates about either 'idealist' or 'materialist' readings of Spinoza make clear, to weaken or otherwise amend *Barrier*.[11] This might involve seeing minds as in some way ontologically dependent on, and thus *pace Barrier* causally or conceptually dependent on, bodies, as in materialist readings, or vice versa for idealist ones. Whether billed as critical correctives to or friendly clarifications of Spinoza's metaphysics, such readings typically presuppose that much of Spinozism can survive the change. As Karolina Hübner forcefully reminds us in criticizing materialist readings of the *Ethics*, this is a mistake: 'What is also at stake is the **internal consistency** of Spinoza's philosophical system in the *Ethics*."[12] EIp10 is an

ineliminable part of the justification for substance monism and the other theses cashing out God's nature (especially EIp14–16), from which virtually all the other central claims of Spinozism are argued to follow.[13] Almost nothing of Spinozism survives its rejection.

Second, almost none of Spinoza's most sympathetic interpreters have worked to elucidate his key argument or primary motivations for believing *Barrier*. Given its centrality, it might seem odd that so many of Spinoza's most charitable readers have tried to make *Barrier* a negotiable part of his overall system. Della Rocca expresses this paper's primary motivation in explaining why this occurs:

> It is **actually not clear why Spinoza holds that there is no conceptual connection between the mental and the physical**, and thus it is **not clear why he holds that any dependence between them would be inexplicable**. This is a sore point between me and Spinoza. But given that he does regard mental-physical dependence as inexplicable, for this reason he invokes the PSR to deny that there is any such dependence. (Della Rocca 2007: 854, emphasis added)

In later work, Della Rocca reverses himself somewhat and gives the only extant argument for *Barrier* I am aware of, a derivation from the PSR.[14] I think this argument fails, as does Spinoza's own demonstration of EIp10, taken in isolation. To be sure, there are oft-cited texts from the *Ethics,* in EIp10 and elsewhere, which explain, *given the totality of Spinoza's other views*, why *Barrier* is a natural position to have. I'll discuss these in the final section. But given that *Barrier* figures *as a premise* in the proofs for nearly all members of this totality, these other views cannot justify it on pains of circularity.[15]

Since this point is essential for what follows, it bears repeating: Spinoza requires an argument for *Barrier* that precedes *almost all* his well-known commitments—

substance monism, mind-body parallelism or identity, and necessitarianism—in the order of justification. The kernel of Spinoza's previously unnoticed *Short Treatise* argument I give here both meets this criterion and answers Della Rocca's question. There is no conceptual connection between the mental and the physical because conceptual connections imply causal interactions, causal interactions between attributes lead to skepticism, and skepticism is false. More specifically, if *Interactionism* is affirmed against a background of attribute conceptual independence, nearly all agents, nearly all the time, should have well-grounded doubts about their tacit or explicit assumption that certain incredibly implausible causal relations between minds and bodies do not obtain. But Spinoza thinks this version of skepticism is false, and so *Interactionism* must be rejected. Thus EIp10, which states the conceptual and causal independence of the attributes and implies *Barrier*, is true.

The next section gives the key passage from the *Short Treatise,* in which representative skeptical scenarios from this class are described, and identifies features of the context necessary for constructing Spinoza's argument. Section 3 uses parallels with Leibniz and Wittgenstein, as well as recent work on Spinoza's methodology and epistemology, to formalize Spinoza's *Short Treatise* argument itself and to clarify the sort of rule-following skepticism at play. In the final section, I uncover hints of the *Short Treatise* argument in Spinoza's *Ethics* and examine recent work tackling issues related to the truth of *Barrier* and the broader disagreements between Spinoza and Descartes. My reading helps explain why Spinoza says what he does in EIp10's favor in the *Ethics*, shows why those remarks are insufficient in isolation but powerful when read in the light

of the *Short Treatise* on the interpretation offered here, and identifies outstanding questions for the Spinozistic argument for *Barrier*.

2.

Spinoza's *Short Treatise* is a confusing text.[16] Thankfully, for present purposes we do not require a coherent and comprehensive interpretation of the text as a whole. To extricate Spinoza's previously unnoticed argument for EIp10 from it, it's simply important to note that a) in the *Short Treatise* Spinoza only inconsistently endorses *Barrier*—that is, he occasionally accepts *Interactionism*—and that b) this presents him with a sort of skeptical problem.[17] This problem then provides the raw materials for the Spinozistic argument for *Barrier,* in the precise sense that only by rejecting the *Short Treatise*'s occasional interactionism, in favor of *Barrier* strictly speaking, can Spinoza avoid the skeptical problem he discusses in the earlier text.

Now, that Spinoza does occasionally violate *Barrier* in the *Short Treatise* should not be controversial. For while in that early text he often hews quite closely to the position of strict causal and conceptual independence of the attributes,[18] he also at times envisions a sort of war for causal control of the body's motion, suggesting that this conflict results in anxiety:

> And because these spirits can also be moved by the body, and so determined [in their direction], **it can often happen that having their motion in one direction because of the body, and in another because of the soul,** they bring about those anxieties which we often perceive in ourselves, without knowing the reasons why we have them. (*KV* I/92, 19–25, emphasis added)[19]

Spinoza is certainly sensitive to the apparent contradiction between those passages where he almost adopts the *Ethics*'s *Barrier* and those where he sounds interactionist. Like Descartes before him, Spinoza initially attempts to resolve the tension by appeal to the tight union between mind and body (*KV* I/91, 29–31): 'The cause of this is, and can only be, that the soul, being an Idea of this body, is so united with it, that it and this body, so constituted, together make a whole.'[20] A few pages later, Spinoza suggests that the body's only effect on the soul is to cause the soul to perceive its own body, and through its mediation, other external bodies. He then explains this union by connecting love with knowledge, saying: 'So whatever else apart from this perception happens to the soul cannot be produced through the body. **And because the first thing the soul comes to know is the body, the result is that the soul loves the body and is united to it**' (KV I/93, 10–13, emphasis added).

Wolf has tried to use passages like these to argue for strict, continuous endorsement of *Barrier* from the *Short Treatise* and the *Ethics*, suggesting: 'Similarly, mind and body are really one whole*,* merely a double-faced mode of substance; mind does not *affect* body, nor body mind; the one simply *is* the other—that is, a parallel aspect of the same reality' (1910: 228–29, original emphasis).[21] This interpretation fails for two reasons. First, it still cannot explain the anxiety passage given above. Second, wholes have questionable ontological status in the *Short Treatise*. Spinoza characterizes them in this way: 'Part and whole are not true or real beings, but only beings of reason; consequently in Nature there are neither whole nor parts' (*KV* I/24, 19–21). So either the whole composed of mind and body does not exist to do the explanatory work required of it, or mind and body form a whole in some different, as yet unexplained sense. Therefore,

on these two grounds I argue that Spinoza's own attempts in the *Short Treatise* to resolve the apparent contradiction, while continuing to affirm a limited *Interactionism*, fail.

But what exactly is the problem that Spinoza's *Short Treatise Interactionism* causes for his overall views, the problem that Spinoza's own appeals to the union of mind and body as one whole fails to solve? Spinoza states the issue as a decidedly skeptical challenge, in a passage that I'll refer to henceforth as *Deviance*:[22]

> The second possible objection is this: **[A]** we see that the soul, **though it has nothing in common with the body**, nevertheless can bring it about that the spirits, which would have moved in one direction, now however move in another direction—why, then, **[B] could they not also make a body which is completely at rest begin to move?** Similarly, why could **[C]** it not also **move wherever it will all other bodies** that already have motion? (*KV* I/97, 1–8, emphases added)[23]

Even if souls and bodies interact causally, as Spinoza in his interactionist moods proposes, there must nonetheless be principled limits on the scope of souls' causal powers over bodies. One plausible such limit is that each soul is naturally connected to a particular body with which it interacts preferentially. It seems that souls cannot control the motions of just any old body, or multiple bodies. But what could explain such limits and justify our confidence that souls cannot, for example, '[C] move wherever [they] will all other bodies', given the complete conceptual independence of the mental and the physical?

Spinoza's response to his own objection is twofold. On one hand, he sometimes argues for a tight mind-body unity as one whole, and suggests that this unity constrains causal interactions across attributes to those between a given soul and its single body (*KV*

I/91, 29–31). I have already argued that this strategy fails on the *Short Treatise*'s own terms.[24] On the other hand, Spinoza's response also includes the passage cited above, where he sounds most like the mind-body parallelist of the *Ethics (KV* I/98, 9–15, 24–36).[25] There, Spinoza sketches a view that closely approximates that given by *Barrier*, before tying his comments back to the objection imagined in *Deviance* and concluding: '**[D]** So Paul's soul can indeed move his own body, but not that of someone else, such as Peter' (*KV* I/98, 14–15).

The initial thought in the *Short Treatise* seems to be this: Spinoza can use the *Barrier*-like response to the possibility envisioned by [C]—that the soul could move wherever it will all other bodies that already have motion—to block the skeptical consequences of [C]. But this *Barrier*-like response, the thought continues, is no obstacle to the sorts of minimally interactionist claims expressed in [D]; namely, that 'Paul's soul can indeed move his own body, but not Peter's,' perhaps because 'no change can occur in the object [Paul's body] unless the same thing actually occurs in the Idea [Paul's soul].' To foreshadow: I do not think this initial thought, which seeks to move towards the view Spinoza defends in the *Ethics* while allowing that souls can move their own bodies, is tenable. Only embracing *Barrier* itself does the trick. I focus on developing this insight through further examination of the *Deviance* passage, along with [D], in what follows.

Interpreting the terse, rather generalized objection in *Deviance* requires some context. The first and crucial thing to note is this: Spinoza's worry here is *not just* the traditional interaction problem! Princess Elisabeth formulates the traditional interaction problem in her 1643 letter to Descartes: 'I ask you to tell me how man's soul, being only a thinking substance, can determine animal spirits so as to cause voluntary actions'

(Descartes 2007: 22).[26] Spinoza echoes this traditional formulation when he argues: 'Since **there is no common measure between will and motion** . . . the forces of the Body cannot in any way be determined by those of the Mind' (EVPref, emphasis added).[27] But in *Deviance* Spinoza just *assumes that the traditional problem is solved*, at least for the sake of argument [A]: '. . . **we see that the soul**, though it has nothing in common with the body, **nevertheless can bring it about** . . .' So Spinoza's problem cannot just be the unintelligibility of Descartes's view, *pace* several interpreters.[28] In this paper's terms, Spinoza's imagined objection presupposes *Interactionism*'s truth and overall intelligibility, denies *Correlation*, and evaluates what follows from these presuppositions.

Two very different sorts of problems arise for *Interactionism* on these assumptions. The first, expressed in [B], is more esoteric, an internal tension Spinoza identifies between Cartesian interactionism and Cartesian physics. Arguably, Descartes thinks that minds can redirect preexisting motions but are incapable of causing new motion in motionless bodies, believing this the only way to preserve the physical conservation laws.[29] The imagined objector questions the legitimacy of this restriction in the context of *Interactionism*. The second sort, in [C]–[D], is more general, more skeptical-sounding, but also more nebulous. I do not claim that mine is the only plausible interpretation, but at least this much seems clear. In [C]–[D], the objector imagines, again on the assumption of *Interactionism* and the denial of *Correlation*, a mind's having limitless causal capability. This limitless capability covers **any** body ([C] '**all other bodies** that already have motion'), including that of **another person** ([D] 'Paul's soul can indeed move his own body, **but not that [body] of someone else**, such as Peter' only if

Spinoza's *Barrier*-like response to the objection succeeds), and **any possible** motions ('why could [the soul] not also **move [them] wherever it will'**). If minds and bodies can interact, Spinoza worries, isn't any pattern of events, any combination of mental acts and extended motions, possible? If so, what *explains* why such deviant patterns do not obtain in general and what *justifies* the widespread assumption that they do not?

3.

Spinoza, it appears, identifies a rule following paradox for interactionism. Wittgenstein's §201 of the *Philosophical Investigations* is the most famous example: 'This was our paradox: no course of action could be determined by a rule, because every course of action can be made out to accord with the rule.' Kripke, whose development of Wittgenstein's argument will be most relevant to my purposes here, initially envisions the rule-following paradox in the guise of a previously unconsidered mathematics problem, '68+57'.[30] Two possible rules are compared, the 'plus' rule which adds in the predictable way and gives '125' and the 'quus' rule, which adds in the predictable way only if both numbers to be summed are less than 57, but simply produces '5' if either summand exceeds 57. Wittgenstein's rule-following skeptic (Kripke 1982: 11) then questions both whether there is any fact that grounds my having meant 'plus' rather than 'quus' (the constitutive question) and whether I am now epistemically justified in applying the 'plus' rule to answer '125' rather than the 'quus' rule to obtain '5' (the justification question). The problem, though Kripke first states it in mathematical terms, ramifies throughout the philosophy of language and metaphysics, in discussions of meaning or causation or anywhere rules or laws purport to connect certain groups of phenomena but not others.

Spinoza's favored version begins not with mathematics but with the rules or laws that purport to connect minds to one particular body but not to any old body indiscriminately.

Three parallels between Spinoza's *Short Treatise* and Wittgenstein's rule following paradox are especially helpful for appreciating further avenues for development of this argument in the Spinoza literature. First, Kripke (1982: viii, 60) sees Wittgenstein as having identified a quite *general* paradox about rule following, an entirely new form of skepticism, which recurs in tackling *particular species* of the issue in the philosophy of mathematics and the philosophy of mind. Regarding the latter, the rule following paradox recurs in Wittgenstein's discussions of the 'private language argument,' the 'problem of other minds,' and what is known in the contemporary literature as the 'pairing problem' for dualism.[31] Similarly, Spinoza's problem actually extends far more *generally*, beyond mind-body interaction, to deviant interactions between modes of any of God's infinitely many attributes.[32] *Prima facie*, the infinite attribute version of the problem is far worse than its *specific application* to mind-body interaction in *Deviance*.[33] Nonetheless, those looking to defend Spinoza's *Barrier* along the lines suggested here might find his argument sharpened by more explicit engagement with the pairing problem debate.[34]

Second, on Kripke's reading Wittgenstein gives a sort of *transcendental deduction* of §580: 'An "inner process" stands in need of outward criteria.' These outward criteria provide necessary evidence governing the correct application of an agent's inner rule for speaking meaningfully or acting purposefully. Now, one important aspect of Wittgenstein's discussion of his own problem is that he in some sense *embraces the skeptical upshot* of his paradox, before proposing a 'skeptical' rather than 'straight'

solution to it.[35] This solution acknowledges that the skeptic's questions are in a sense unanswerable. It then relies on a language game essential to our form of life to undermine skepticism that might prohibit the ordinary business of getting by:

> [This language game] licenses, under certain conditions, assertions that someone 'means such-and-such' and that his present application of a word 'accords' with what he 'meant' in the past. It turns out that this role and these conditions involve reference to a community. They are thus inapplicable to a single person considered in isolation. (Kripke 1982: 79)

Wittgenstein's skeptical solution requires that correct rule following attributions generally, and pain or meaning ascriptions more specifically, always involve reference to a community. One common criticism of this move is that Wittgenstein presupposes verificationism or behaviorism as a premise.[36] Kripke (1982: 100, 100n81, 120n5, original emphasis) rebuts this charge, arguing that the need for outward criteria, 'circumstances, observable in the behavior of an individual, which, when present, would lead others to agree with his avowals,' are *transcendentally deduced* in a Kantian sense, not simply assumed. These outward criteria are among the necessary conditions for the possibility of warranted assertions of rule following, meaning, and pain attribution required to avoid interminable entrapment in the skeptical paradox.

On my interpretation, Spinoza's argument for *Barrier* has a similarly Kantian flavor.[37] *Interactionism* takes the place that transcendental realism occupies in the *Critique*, in that both are seen as engendering skepticism or antinomies not absolutely, but only on the (optional) assumption of their truth.[38] For Spinoza, embracing *Barrier* completes a key step in his arguments for the main conclusions of the *Ethics*, which helps

avoid the skeptical results to which *Interactionism* gives rise. But the parallels between Spinoza and Wittgenstein are even sharper, I think. For the conditions Spinoza places on the proper investigation of the mind quite clearly echo Wittgenstein's demand that inner processes stand in need of outer criteria.[39] Spinoza writes:

> And so to determine what is the difference between the human Mind and the others, and how it surpasses them**, it is necessary for us, as we have said, to know the nature of its object, i.e., of the human Body. I cannot explain this here,** nor is it necessary for the things I wish to demonstrate. (EIIp13s, emphasis added)

For Spinoza, natural scientific investigation of God or Nature, which results from Extension's publicly observable character, is the best way to understand the mind, even though nothing mental directly explains anything extended.[40]

Third and finally, Kripke argues that, despite the importance of outward physical and behavioral criteria for licensing warranted assertions of rule following, meaning attributions, and being in pain, Wittgenstein still believes *minds and the mental are ineliminable*. Kripke interprets Wittgenstein this way for two reasons that emerge most clearly in his discussion of a body's 'having' a 'mind' that is in pain. Kripke envisions someone who attempts to 'bypass these [mental] intermediaries and deal directly with the connection of the sensation and physical object,' by trying to *locate* pains in three senses, thereby avoiding any reference to minds (Kripke 1982: 129, original emphasis). Pains, one might think, are located in the sense that damage to a specific area produces pain, relief in that same area often eliminates it, and pains are subjectively felt in specific areas, like the feet or arms (Kripke 1982: 128). But, Kripke thinks, a wholly physical or

behavioral account of pain, on the model sketched here, cannot succeed by Wittgenstein's lights. This is 'precisely because I cannot then define what it means for "another mind" to have the sensation in a given physical object, as opposed to "my" having it there' (Kripke 1982: 129–30)

This discussion neatly parallels recent and historical debates about materialist readings of Spinoza and relatedly about why Spinoza thinks there are multiple attributes of God, including Thought.[41] Indeed, Spinoza's *Ethics*-style response to *Deviance* in the *Short Treatise* parallels in striking ways Wittgenstein's argument that a purely physical account of pain sensations cannot account for the distinction between my having a pain at that location and some other mind doing so:

> We said then that **although Nature has different attributes, it is nevertheless only one unique being, of which all these attributes are predicated**. We added that the thinking thing is also unique in Nature and that it is expressed in infinite Ideas, according to the infinite things that are in Nature. For if the body receives one mode, such as, for example, Peter's body, and again another, such as Paul's body, **the result of this is that there are two different ideas in the thinking thing**: One Idea of Peter's body, which makes the soul of Peter, and another of Paul's body, which makes Paul's soul. So then, the thinking thing can indeed move Peter's body, through the Idea of Peter's body, but not through the Idea of Paul's body. **So Paul's soul can indeed move his own body, but not that of someone else, such as Peter.** (*KV* I/98, 9–15, emphases added)[42]

That is, defining which mind, Peter's or Paul's, is having a given thought involves seeing whose body, which corresponding set of neural activity, is at a particular location in

Extension. *But Peter and Paul are distinguished both by the different locations of their bodies, and by the two different ideas those bodies make in the thinking thing*. And this is why Peter's soul can only move—Spinoza will say 'is only of' rather than 'can move' in the *Ethics*—Peter's body, not Paul's or anyone or anything else's. The mind-body parallelism Spinoza develops fully in the *Ethics* and foreshadows in the *Short Treatise* requires both Thought and Extension to dissolve the skeptical paradox. So too, Wittgenstein requires both outward physical criteria and ineliminable reference to 'the elusive conception of another "self" and its relation to material objects and sensation' to achieve the same (Kripke 1982: 130).

Even if one finds the foregoing parallels somewhat thought provoking, one might nevertheless think that applying Wittgensteinian rule-following considerations to the early modern period to understand Spinoza's texts constitutes gross anachronism.[43] On the contrary, quite apart from Spinoza, rule-following considerations are native to the early modern period, as Leibniz's *Discourse on Metaphysics* makes clear*:*

> . . . Not only does nothing completely irregular occur in the world, but **we would not even be able to imagine such a thing.** . . . if someone traced a continuous line which is sometimes straight, sometimes circular, and sometimes of another nature, it is possible to find a notion, or rule, or equation common to all the points of this line, in virtue of which these very changes must occur. . . . **But, when a rule is extremely complex, what is in conformity with it passes for irregular.** (Leibniz 1989: 39, emphases added)

Leibniz's invocation of a notion or rule or equation in virtue of which any changes, no matter how irregular, *must occur* should help forestall a natural

misunderstanding of Spinoza's *Deviance* passage from the *Short Treatise*. One might think that the issue with denying *Barrier* and affirming *Interactionism* is that the latter violates the PSR, but this is a mistake.[44] For Leibniz's point is precisely that, for *any pattern of events*, there is a notion or rule that explains how and why they occur exactly as they do. Any pattern of laws connecting minds to bodies would satisfy the PSR, or would, as Spinoza puts it in *Ethics* EIp11s, have 'a cause or reason, as much for its existence as for its nonexistence.'[45] The issues raised by *Deviance* extend beyond both the traditional interaction problem and any putative costs of violating the PSR.

Moreover, while Descartes does not echo Leibniz's explicit invocation of rule following, he too appears deeply concerned with issues contained in each of the three parallels drawn above. This, at least, appears to be one upshot of Chantal Jaquet's insightful recent book on the affects and passions in Spinoza. Jaquet begins by describing how Descartes and Spinoza differ from their predecessors:

> Although the passions of the soul bring into play the union and are in reality of a psychophysical nature, Descartes seeks to explain them as a natural philosopher. . . . [But] Spinoza also calls for the naturalization and rationalization of the passional phenomena when he proposes to deal with them geometrically. This approach involves breaking with those who considered the passions as things outside nature and contrary to reason. . . . It must be noted that Spinoza also deals with the affects as a natural philosopher, to the extent that he contemplates considering them as bodies. (2018: 35–37)[46]

Jaquet's comparison between Descartes and Spinoza here, both of whom examine the affects as natural scientists in contradistinction to their predecessors, echoes one feature

of the second parallel above. Namely, for both of them scientific investigation of the body is in some sense the best avenue for ultimately understanding the mind, despite Spinoza's causal and explanatory isolation of the mental and the physical.[47] This task, as Jaquet outlines it, involves a rigorous natural scientific investigation of the mind and the body that avoids two temptations. Namely, it must not stray either into dualism (hence the connection to the causal pairing problem in the first parallel) or into materialism (hence the third parallel's insistence on the ineliminability of the mental).[48] Taken together, these parallels help organize the connections between Spinoza's early work, that of his contemporaries, and contemporary rule following discussions. The foregoing shows how they outline a task (inquiry into the mind through the natural scientific investigation of body) and ward off potential pitfalls (dualist or materialist models). Moreover, it shows that we must resist easy solutions (among other reasons, by showing that the PSR alone cannot play the outsized role in Spinoza's system that some recent interpreters have taken it to play). Further consideration of these connections thus potentially reorients purely interpretive discussions in the Spinoza literature, but also provides rich raw materials for crafting an alternative to currently dominant views in the philosophy of mind.[49]

Having situated Spinoza's skeptical challenge within contemporary discussions of rule following, especially as they relate to the metaphysics of mind, we should now try to extract a formal sketch of the argument for *Barrier* from the materials in *Deviance*.[50]

(1) Every attribute is conceptually independent.

(2) *Interactionism* is true. That is, *Correlation*—conceptual independence entails causal independence—is false.

(3) If (1) and (2), there are good grounds for doubting: [C] souls *cannot* impart any motion to any body wherever they will and [D] Paul's soul *cannot* move Peter's body.

(4) But there are no good grounds for doubting: [C] souls *cannot* impart any motion to any body wherever they will or [D] Paul's soul *cannot* move Peter's body.

(5) If there are no good grounds for doubting that *Paul's* soul cannot move *Peter's* body, then there are no good grounds for doubting that *Paul's* soul cannot move *Paul's* own body.

(6) Therefore, given (1), not (2). *Interactionism* is false and *Correlation* is true.

(7) Therefore, *Barrier* is true.

I take premise (1), as stated before, to be common ground between Spinoza and his interlocutors, most notably Descartes. *Interactionism*, introduced for *reductio*, is given by (2).[51] Premise (3) turns the questions posed in the *Deviance* passage into concrete skeptical possibilities—that souls can impart any motions to just any body, and in particular, that Paul's soul could move Peter's body. It then denies that an interactionist who affirms the total non-causal conceptual independence of the mental and physical can justifiably deny these deviant causal possibilities. Premise (4) expresses anti-skepticism, as it seems we do have good grounds for denying that souls can impart motions to just any body, or that Paul's soul can move Peter's body. Premise (5) claims that whatever anti-skeptical grounds preclude *Interactionism* in general work equally well against the specific interactionist case of a soul and its own body. But given that the skeptical causal possibilities can be rejected, *Interactionism* is false and thus *Barrier* is true.

With *Barrier* defended, Spinoza can assert (let us simply suppose), all his major conclusions from the *Ethics*, including substance monism, mind-body parallelism and mind-body identity, and necessitarianism.[52] Spinoza's mature system precludes the possibility that any soul might impart just any motion to any body, or indeed to any body whatsoever. There is exactly one necessary set of finite modes of each attribute, and thus one set of connections among the modes of Extension, which is causally isolated from but paralleled by the corresponding modes of Thought to which they are identical. In sum, *Interactionism* gives rise to the rule following paradox and cannot solve it. *Barrier* solves the rule following paradox, gives rise to the totality of Spinoza's views in the *Ethics*, and Spinoza's mature system prevents the rule following paradox from reemerging.

Fully defending an argument that both results from the materials in *Deviance* and whose formal presentation jibes perfectly with discussions of skepticism in contemporary epistemology lies well beyond the scope of this paper. For one, Spinoza does not have, and probably would not accept, many of the epistemological concepts such discussions typically presuppose, though his thinking would be far more at home in current debates in the philosophy of mind. But I can say more about the crucial premises (3)–(5), drawing on Peterman's insightful recent interpretation of Spinoza on skepticism. Based on her analysis of Spinoza's most explicit discussion of these issues in the *Principles of Cartesian Philosophy*, Peterman suggests that, according to Spinoza:

> S's belief that *p* is certain if and only if all three of the following are true:
>
> (a) *p* is a "mathematical truth." A "mathematical truth" in the PPC seems to be a truth that we are "compelled to infer" from a clear and distinct idea, *and not*

necessarily one that concerns mathematics (C 238).

(b) S cannot discover a "ground for doubting" *p*. (According to Spinoza, a "ground for doubting" *p* is an idea from which a doubt that *p* can be inferred—so ultimately we will want to know: what is a doubt that *p*, for Spinoza?)

(c) S can infer *p* (or, S can "infer that *p* is most certain" (C 237)) from every other idea that S can attend to (Peterman 2018: 343–44).

Criterion (b) requires that a ground for doubting *p* be an idea from which a doubt that *p* can be inferred. Premise (3) of my reconstructed Spinozist argument suggests that, on the assumption of *Interactionism*, we have good grounds for doubting: [C] souls *cannot* impart any motion to any body wherever it will or [D] Paul's soul *cannot* move Peter's body. That is, we have good reason to think that skeptical interactionist possibilities cannot be ruled out. Premise (4) then suggests that anti-skeptical grounds do exist, such that *Interactionism* is the assumption to reject, and premise (5) applies those same anti-skeptical reasons to the limited, intuitive case of a soul's interaction with its own body.

Obviously, the interactionist would like to exclude the more skeptical interactionist possibilities while preserving the special case of interaction between a soul and its own body. But given criterion (b) above, I think we can see why Spinoza thinks this desire is a quixotic one. The problem is that the idea from which a doubt can be inferred about our ability to rule out skeptical options—a soul moving any body at will, or Paul's soul moving Peter's body—*just is the non-causal conceptual independence of the attributes*. This shared Spinozist-interactionist premise denies that there are any conceptual connections between the attributes of Thought and Extension.[53] But now consider the interactionist who suggests preserving the limited case of causal interaction

between a soul and its own body while denying that other deviant causal relations can arise between a soul and another's body, or between souls and any distant body whatsoever.

In making this proposal but denying the deviant causal possibilities, Spinoza thinks, one thereby *asserts a set of conceptual connections* between what might be called the active powers of a soul and the receptive powers of its own particular body. One correspondingly denies any such receptivity in another's body or in far-flung distant bodies. But the impossibility of such conceptual connections—those that definitively countenance some possibilities but definitely preclude others—can be straightforwardly inferred from attribute conceptual independence.[54] This entails not only the weaker claim that [C] and [D] are not certain, on the assumption of *Interactionism*, in virtue of failing criteria (b) (i.e., since a ground for doubting [C] and [D] exists). It further entails premise (5), which claims that all positive claims about a soul's causal connections to its particular body will have the same grounds for doubt, which are rooted in the complete conceptual independence of Thought and Extension.

Of course, Spinoza does not himself think that [C] or [D] is doubtful, but his reasons for thinking them immune to doubt, using Peterman's framework, are far stronger than those of the interactionist. For once *Interactionism* is rejected and *Barrier* affirmed, Spinoza's other arguments in the first two books of the *Ethics*, those which employ *Barrier* as a premise, can help him establish that EIIp47: 'The human mind has an adequate knowledge of God's eternal and infinite essence.' From this idea, as Peterman reads Spinoza, 'If I begin with a C&D idea of God's essence, carefully deduce what follows from it in the proper order, and populate my mind only with the resultant ideas, I

will never generate a ground for doubting that I know any of these ideas' (Peterman 2018: 345). Spinoza, but not the interactionist, thus ends up affirming [C] and [D] with certainty, in a way that respects premise (4) by making clear that there is no ground for doubting them, contrary to the position in which the interactionist finds himself.

To be clear, this does not necessarily entail that the interactionist has many, or even any, false beliefs about these far flung possibilities. Both Spinoza and Descartes, for instance, would accept [C] and [D]. Rather, here Spinoza simply turns the well-known Cartesian point about the atheist geometer against interactionism itself. Whereas Descartes acknowledges that the atheist geometer can perform all sorts of technically correct proofs, the atheist geometer's results are always open to doubt if the evil demon scenario happens to occur to him.[55] Similarly, Spinoza admits that the interactionist truly believes that skeptical scenarios of the sort alluded to in [C] and [D], such as Paul's soul moving Peter's body, do not obtain. But he argues that his interactionism, combined with his belief in attribute conceptual independence, makes such beliefs forever vulnerable to well-grounded, reasonable doubts. For by the interactionist's own lights, given conceptual independence, he should not be able to make any firm claims about which bodies a soul can (its own) and cannot (all other bodies out there) control.

Since there are *zero* conceptual connections between the powers of any soul and the receptivity of any given body, the interactionist cannot guarantee himself exclusively true beliefs that attain some other reasonable epistemic standard while simply failing to meet the standards of certainty Spinoza requires. That is, interactionism's problem is not just that Spinoza deploys tacitly infallibilist standards of knowledge. *Every* claim about causal relations between particular minds and bodies is doubtful in exactly the same way

and to the same degree. The conceptual independence of the attributes prevents the interactionist from having *any justification at all*, not just infallible ones, for limiting the scope of possible causal relations between Thought and Extension.

Much remains to be said about this argument. One natural way of pushing the conversation further would be to bring Spinoza's arguments into dialogue with the vast literature on Cartesian skepticism. Those few interpreters who have written at length about Spinoza's relationship to skepticism have taken this tack; the *Short Treatise* argument would simply be another instance of this general trend.[56] But Spinoza's brand of skepticism is actually not all that similar to the familiar Cartesian fare. Rather, Spinoza envisions sets of competing causal relations between minds and bodies, ordinary on one hand and deviant, skepticism-engendering on the other, all of which are necessitated and explained just as the PSR requires. Unlike Cartesian skepticism, Spinoza's problem arises when the unexpected implications of a *widespread, ordinary view* of mind-body interaction come to light. By contrast, Descartes knows full well that evil demon doubts are artificially constructed for a particular purpose in a specific, limited philosophical context. Spinoza thinks, however, that the mere dual assumptions of *Interactionism* and attribute conceptual independence simply do not permit us to say that there is any fact that grounds the obtaining of ordinary but not deviant causal relations, or that epistemically justifies our assumption that they do.

4.

The preceding discussion of the *Deviance* passage gives us good reason to question Della Rocca's (2007: 854) contention that Spinoza's reasons for *Barrier* are opaque and

undefended. As we have seen, allowing causal or conceptual connections between Thought and Extension, as *Interactionism* does, gives rise to a set of skeptical scenarios in [C]–[D] whose resolution requires *Barrier*. While in the *Short Treatise* itself Spinoza adopts a view quite close to, but not yet exactly *Barrier* that still licenses,[57] he thinks, claims like 'Paul's soul can indeed move his own body, but not that [body] of someone else, such as Peter,' by the *Ethics* this exception has been removed. Spinoza's *Ethics* affirms the complete conceptual *and* causal isolation of each attribute from every other, including in the case of the mind and body of one individual human being. I have been suggesting that Spinoza's *Barrier* in its mature form springs from continued meditation on the inadequacy of Spinoza's own proposed solutions in the *Short Treatise*, whose failures by Spinoza's own lights I've already discussed. Granted, I admit to lacking biographical evidence that would fully substantiate the claim that meditation on this problem leads Spinoza directly to his mature views. I've simply argued that it is a problem for *Interactionism*, one the Spinozism of the *Ethics* lacks thanks to *Barrier*.

This final section does three things. First, it confirms what has thus far been presupposed, namely that *Barrier* requires additional justification beyond what it receives in the *Ethics*. In so doing, we can also see remnants of the *Short Treatise*'s *Deviance* passage rear their heads in the *Ethics*, albeit outside its explicit justificatory structure. Second, it discusses possible Cartesian interactionist attempts to preserve mind-body interaction in the special case of a soul and its own body in greater detail, through discussion of recent work seeking to identify and adjudicate the deepest disagreements between Spinoza and Descartes. Finally, it also identifies some major outstanding questions for the argument developed thus far.

Having set out an alternative history of the development of *Barrier*, I now consider what Spinoza says on its behalf in the *Ethics*, beginning with EIp10's demonstration, which reads: 'For an attribute is what the intellect perceives concerning substance, as constituting its essence (by D4); so (by D3) it must be conceived through itself, q.e.d.' That is, Spinoza appears to suggest that *Barrier* follows simply from his definitions of substance and attribute. But this demonstration is not confidence inspiring. For instance, EId3 defines *substance* as self-inhering, self-conceived, and conceptually self-contained. As Spinoza puts it: 'By substance I understand what is in itself and is conceived through itself, that is, that whose concept does not require the concept of another thing, from which it must be formed.' And EId1 connects self-conception explicitly to self-causation—'by cause of itself I understand that whose essence involves existence, or that whose nature cannot be conceived except as existing.' But why should constraints on self-conception, self-inherence, and self-causation apply directly to *the attributes* of substance, rather than only to substance itself?

One too quick answer might be: the same constraints apply to substances and attributes because Spinoza thinks, as he says in EIp4d, that substances and attributes are 'the same.' Eisenberg (1990: 4, 9) discusses this response before rejecting it, arguing:

> If (e.g. Thought), as an attribute of God, is supposed to be identical to the essence of substance but also Extension is identical to the essence of substance, then two things which, according to Spinoza himself, are supposed to be irreducibly different from one another (namely, Thought and Extension) turn out to be identical to one and the same thing and, hence, identical to each other . . . [Furthermore] it is hard (for me) to see why Spinoza gives the emphasis that he

does to the notion of substance if in fact he believes it has the same content as does the notion of attribute(s).

Eisenberg's description of the problem with treating 'substance' and 'attribute' as the same appeals to an apparent failure of the Transitivity of Identity. For if both Thought and Extension were identical to Substance, simple substitution would seem to garner that Thought=Extension, *contra* Spinoza's explicit insistence that each attribute is independent, distinct from the others, and conceivable only through itself.

Recently, Garrett has proposed a reading of Spinoza's metaphysics that makes sense of the failure of the Transitivity of Identity Eisenberg judges fatal to the sameness proposal. The stakes here, as Garrett rightly notes, are high, since 'given their fundamentality [the principles of the Transitivity of Identity and Indiscernibility of Identicals] to our own understanding of identity, we cannot fully understand Spinoza's philosophy unless we understand how this [Spinoza's apparent denial of each of the preceding] is possible' (Garrett 2017: 13). Garrett's argument is rich and complex, and I cannot do justice to its full scope here. But I do think that his solution is a satisfying one as regards the limited question of whether Spinoza's assertion—that substance and attribute are *in some sense* the same—courts inconsistency. However, I simply deny that it helps Spinoza with the particular problem we are concerned with most immediately, namely, justifying E1p10.

Garrett's basic strategy is to argue that attributes are not items *within* Spinoza's ontology, as are substances and modes, but *structures of it*.[58] Claims about the 'sameness' of substance and attributes are thus genuine truth claims, for Spinoza, but they are not statements of numerical identity, since 'substance' names an item within the ontology

while ‘attributes’ are structures of those items, substances and modes, within it. As Garrett puts the point:

> The particular sameness expressed by G3 and G4—Substance-Attribute Identity—concerns a sameness of *truths* concerning substance and the manners of existence that structure the ontology [attributes], and does not constitute an identification of substances or affections *within the ontology* itself. If this is correct, then Spinoza can accept a version of the Transitivity of Identity understood as a principle governing the numerical identity of items—namely, substances and modes—within his ontology. (Garrett 2017: 40)

I think this is exactly right, and I think that Garrett is correct to look for a way of understanding Spinoza’s philosophy that does not problematically reify attributes as just another item in Spinoza’s ontology, alongside substances and modes. His way of understanding so-called “attribute neutral” properties, as disjunctive, derivative properties of attribute-specific ones, is similarly salutary (Garrett 2017: 30). Taken together, with these two moves Garrett helps us to avoid many problems that I think are ultimately specious, but might initially seem quite serious, in understanding Spinoza’s mature system.[59]

But the value of Garrett’s interpretation should not mislead us about its starting points. Indeed, Garrett is quite clear that he is trying to show how we might see Spinoza as preserving, in some sense, fundamental properties of our contemporary understanding of the identity relation, *if we presuppose the basic claims of Spinoza’s system*—EIp10 itself, but also substance monism, mind-body identity theory, etc. Thus Garrett uses EIp10 and its consequences ubiquitously *to generate* the very puzzles concerning the

Indiscernibility of Identicals and the Transitivity of Identity he then attempts, successfully in my view, to solve. So his interpretation does constitute an additional reason for finding this mature Spinozist system plausible. He does show that we need not see Spinoza as radically at odds with our contemporary understanding of the identity relation. But he *does not* give an independent argument for Spinoza's basic conclusions.

This all makes sense, since it would seem rather surprising if *Barrier* followed directly from the definitions of substance and attribute, a terminology Spinoza ostensibly shares with Descartes, who nevertheless accepts *Interactionism* and denies *Correlation*. If his idiosyncratic restrictions on attributes and their modes (namely, *Barrier*) did result merely from his own particular *definitions* of attribute and substance, they would be woefully dialectically ineffective against interactionists like Descartes.[60] For as we have seen, Descartes acepts a *strong conceptual independence* of Thought from Extension, as Spinoza does. Descartes just denies *Correlation*, and thus *Barrier,* in part because he thinks attributing multiple, conceptually independent attributes to a single, simple subject is incoherent:

> As for the attributes which so constitute the natures of things**, it cannot be said that those which are different***,*** and such that the concept of the one is not contained in the concept of the other, **are present together in one and the same subject***;*** for that would be equivalent to saying that one and the same subject has two different natures – a statement that implies a contradiction, at least when it is a question of a simple subject (as in the present case) rather than a composite one. (CSM I 298, emphases added)

Fundamentally then, it seems to me that Spinoza's demonstration in EIp10d and EIp10s cannot justify *Barrier*, since his Cartesian interlocutors simply deny that their shared terminology of substances and attributes remains coherent if used as Spinoza intends.

However, recently Stetter (2019) has argued that the ostensible overlap in substance-attribute terminology between Descartes and Spinoza is merely apparent, and that their deeper definitional differences are central to evaluating their respective positions. Stetter develops Francois Lamy's argument against Spinoza's *Ethics* on Descartes's behalf in his recent work, one that runs, if I understand it correctly, as follows.[61] First, Lamy argues that Spinoza faces the problem of God's unity (the Unity Objection), namely, that of explaining how many conceptually independent attributes can pertain to a single substance. Spinoza's response, which Stetter deems successful, is to argue that the idea of God as infinitely expressive through infinite attributes is central to Spinoza's very concepts of 'substance' and 'attribute'. These concepts, therefore, are God-specific and must be understood with reference to this Spinozistic definition of God. Lamy then retorts that Spinoza's definition of God simply begs the question against Descartes (the Bedrock Objection). But, Stetter thinks, Spinoza would simply respond first, that we do all do implicitly already have his concept of God, rather than Descartes's, and second, that the 'onus of proof should fall on the theologically-minded Cartesian to explain how God could be the most real being without possessing infinitely many attributes.'[62] While Stetter seems broadly sympathetic to both lines of reasoning, he ultimately concludes that Spinoza can meet the Cartesian challenge in the way he describes.

I think that there are two related problems with Stetter's characterization here. The first concerns Stetter's attempt, on Spinoza's behalf, to shift the burden of proof to Descartes, on the assumption that he wants to argue that God is the most real being 'without possessing *infinitely many attributes*.' Whereas before Stetter spoke, quite correctly, of the problem of God's unity as the problem of how 'several, *conceptually independent* attributes can pertain to one substance,' here he shifts to talking of infinitely many attributes *simpliciter*, dropping reference to their conceptual independence.[63] This is a crucial qualification, however, since as many scholars of Descartes have noted, and as Stetter appears to recognize at many points throughout his article, the Cartesian God has infinitely many (albeit conceptually interrelated) attributes.[64]

Relatedly, once we reinstate the conceptual independence requirement for attributes, then we can see that Stetter's attempt to shift the burden of proof in just this way fails. For Descartes (CSM I 298) already concedes that if a *subject is composite* then it can have multiple conceptually independent essences. Hoffman, for example, relies on this point extensively in his discussion of the unity of the human being as a composite subject in Descartes's thought. But this just returns us, in the terms of Stetter's argument, to Lamy's Unity Objection, which was that Spinoza's God is a composite of infinitely many other substances, rather than a single one. Stetter's argument has not advanced to bedrock so much as returned to the beginning.[65] So whatever the merits of this burden-of-proof shifting strategy are, I think that Spinoza's position is significantly stronger when seen in the light of the *Short Treatise* argument I develop here, one that develops concrete problems for the Cartesian that arise on the assumption of *Interactionism*.

Spinoza's interpreters, both friendly and critical, have not simply sought to justify *Barrier* by appeal simply to Spinoza's demonstration of EIp10. So I want to consider two final recent attempts to adjudicate matters between Descartes and Spinoza. The first, due to Anat Schechtman, begins with the ostensible overlap in basic definitions between Descartes and Spinoza, though she ends up focusing on a particular disagreement over the classification of dependence relations that is especially relevant to our concerns here. The second, Karolina Hübner's recent work on the mind-body relationship in Spinoza, tries to justify *Barrier* more directly.

Schechtman begins with what she calls the familiar story, according to which Spinoza borrows Cartesian fundamental concepts of 'substance' and 'attribute', pursues the implications of these concepts more rigorously than Descartes himself does, and ends up with his substance monism. Schechtman argues that this familiar story, though in some ways grounded in the texts, is not true. Specifically, while Descartes and Spinoza both accept that substance must be independent in some way, Spinoza requires, while Descartes denies, that this substantial independence requires causal independence. As Schechtman puts it:

> The crucial disagreement between Descartes and Spinoza, it will turn out, concerns whether causation is what I call an *ontological dependence relation*—the kind of dependence relation, of which inherence is the paradigm, that a substance does not (indeed, cannot) bear to any other entity. (Schechtman 2018: 1)

Translating Schechtman's terms to those of this paper, their key conflict concerns *Correlation*—that conceptual independence, which explicitly includes non-causal relations of ontological dependence, entails causal independence.

Schechtman's basic idea is that denying *Correlation*, in particular by arguing that causation is not an ontological dependence relation and thus that causal independence is not entailed by ontological independence, allows Descartes to parry the charge that he inconsistently applies his own basic concepts, as in the familiar story. On this reading, minds and bodies, as Cartesian substances, are ontologically independent, both from each other and from God, while nonetheless causally dependent on God. This position is only inconsistent if Spinoza can successfully argue that the first (ontological) sort of independence entails the (causal) second sort. Rather than discuss all aspects of her sustained argument in detail, I want to accept much of what she says about Spinoza for the sake of argument and focus on her defense of Descartes.[66]

Schechtman (2018: 12) argues persuasively in my view that both Descartes and Spinoza require that 'modes, which ontologically depend on a substance, both inhere in and are conceived through a substance.' However, Schechtman thinks their agreement ends at this point, since for Descartes, 'from the perspective of intelligibility—with respect to understanding or conceiving what an entity is—causal relations are not always relevant' (Schechtman 2018: 12). While Descartes preserves the link between causal and conceptual independence in some cases, most notably God's, he does not require it in general. Schechtman's preferred understanding of the Cartesian position is that a Cartesian substance 'may (and generally does) stand in a causal relation to, and hence may be causally dependent on, other entities; it just cannot do so *by its nature'*

(Schechtman 2018: 14). As Schechtman reads Descartes, whereas God's nature involves necessary existence, and hence demands consideration of God as self-caused, minds and bodies are substances that causally depend on God, albeit *not in virtue of the natures of mind and body alone*. Thus, this causal dependence does not threaten their substantiality.

In response to Schechtman's defense of Descartes, I would like to make two subsidiary points, and one major one. First, distinguishing ontological (i.e., non-causal conceptual, in this paper's terms) independence from causal independence, as Schechtman does, is a theologically risky route for Descartes to take. It relies on our simply presupposing that Descartes can show, on other grounds Schechtman leaves unspecified, that the two senses of independence coincide for God. But for all she says, Descartes's ontological argument might be able to show at most that God is a necessarily (ontologically independent) existent deity that is nonetheless Himself causally dependent. This, of course, would be a theologically disastrous result. At several points she does appeal to Descartes's notion of *causa sui*, but this notion, it is well-known, was controversial when used by anyone, including but not limited to, Descartes and Spinoza.[67] Indeed, much of the preceding Christian tradition explicitly denies that God requires any cause, or that is it at all coherent to speak of God as cause of Himself. Saving Descartes from one inconsistency by (potentially) introducing another might be dialectically effective against an interlocutor like Spinoza, but it is not an ideal strategy.

The second challenge for Schechtman's interpretation, I think, is that there are good reasons for thinking that minds and bodies *are, by their natures*, causally dependent in general, and causally dependent on God in particular. To her credit, Schechtman considers two objections along these lines. I will focus on the question of whether minds

and bodies depend by their nature on God specifically. In a long footnote, she considers the question of whether minds and bodies, as finite, depend by their natures on God as the infinite being. Schechtman (2018: fn. 53) offers three reasons for rejecting this possibility in the Cartesian case: first, finitude is a privation, and thus an accident rather than an essence; second, minds and bodies are not necessarily finite, since they might have been indefinite (albeit not infinite); finally, that even if minds and bodies are necessarily finite, this is arguably only one of their *propria*, rather than part of their essence. But I think this might be all somewhat beside the point, since arguably the Cartesian meditator does not argue indirectly, through the finitude of mind, to its necessary dependence on God. Rather, the meditator argues directly that *being made by God*, and hence being *causally dependent*, is at least a clear a part of his nature as thinking is. This comes out clearly in the Third Meditation, where Descartes writes:

> And indeed it is no surprise that God, in creating me, should have placed this idea in me to be, as it were, the mark of the craftsman stamped on his work—**not that the mark need be anything distinct from the work itself.** But the mere fact that God created me is a very strong basis for believing that I am somehow made in his image and likeness, and that **I perceive that likeness, which includes the idea of God, by the same faculty which enables me to perceive myself. That is, when I turn my mind's eye upon myself, I understand that I am a thing which is incomplete and dependent upon another.** . . . The whole force of the argument lies in this: I recognize **that it would be impossible for me to exist with the kind of nature I have—that is, having within me the idea of God—** were it not the case that God really existed. (CSM II 35, emphases added)

Descartes here not only strongly implies that the divine mark—the mind's created nature—might be indistinguishable from the mind itself, and thus that the mind's nature just is *the mark of being made*. He also uses almost precisely the same language when he claims that his nature is that he is a thinking thing as when he states that his nature is to be dependent on another, namely God.[68] So not only does Schechtman's interpretation endanger the causal independence of God, per my first response, but it also seems to ignore Descartes's own direct appeals to *his nature as created*, stamped by the craftsman and constantly dependent on him.

Finally, and most centrally, even if we ignore these first two issues, I actually think that Schechtman raises *and* concedes the central issue of this paper. That is, in at least two places she notes that one consequence of severing any necessary connection between ontological and causal independence is that the causal relations between minds and bodies need not be intelligible. The first case occurs when she observes in a long footnote: 'A similar point is well-documented in the literature on specific types of Cartesian interaction (body-body, mind-to-body, and body-to-mind) each of which has been argued to hold without the relation of conception or intelligibility between the cause and effect' (Schechtman 2018: fn. 40). The second occurs in her conclusion, when she notes that the basic disagreement between Descartes and Spinoza might concern what she calls a *genetic view of natures*, namely, that causal relations belong to the nature of their effects (Schechtman 2018: 19–20).

But if what I have argued in the first sections of this paper is correct, then Spinoza's *Short Treatise* argument is precisely that the denial of this genetic view of natures, this too easy acquiescence to the absence of any intelligible relation between

cause and effect, has untoward and unappreciated skeptical consequences. This is so both in general, and in the particular case of individual souls and bodies ('why cannot a soul move wherever it will any body . . . why can Paul's soul move his own body, but not that of another, such as Peter'). But if these skeptical consequences are false, and if Cartesian *Interactionism* really does have them as consequences, then we can see the disagreement between Descartes and Spinoza differently than Schechtman would have us see it. On her reading, their disagreement boils down to whether causation is an ontological dependence relation, or perhaps whether a genetic view of natures is correct, with each side occupying defensible, and indeed actually well defended, territory. Given, however, that I have just argued both that Descartes did think that minds and bodies were, by their nature, dependent on God, and given Descartes's obvious concern to avoid any sort of skeptical conclusions, it seems that things are far less rosy for Descartes than Schechtman suggests. But it takes Spinoza's unnoticed argument from the *Short Treatise*, the one I've tried to bring to light here, to help demonstrate why.

I turn finally to another recent argument along lines similar to those I develop here. In recent work, Hübner offers an extremely insightful treatment of the mind-body relation in Spinoza, one that emphasizes the importance of *Barrier* to Spinoza's thought and tries to resolve outstanding puzzles while preserving it.[69] There, Hübner cites EVPref to argue that the *unintelligibility* of causal relations between minds and bodies, due to the lack of a common measure between them, motivates *Barrier*.[70]

Now, Hübner is undoubtedly correct that Spinoza finds mind-body interactions unintelligible. This was precisely the point I just emphasized in arguing that Schechtman appears to raise and concede the central issue of this paper. However, as noted in section

1, *Barrier* requires justification that precedes Spinoza's other commitments, since it is used as a premise in arguing for them. But this passage occurs far too late in the *Ethics*, in the Preface to Part V, and outside its overall propositional structure, to play that role.[71] Moreover, since Descartes accepts the conceptual independence of the attributes, Spinoza once again requires an independent argument for *Correlation* to get *Barrier*.[72] Otherwise, we cannot infer the absence of a common (causal) measure from the absence of a common (conceptual) one. Newlands (2018) does argue for *Correlation* on Spinoza's behalf, as does Schechtman, but unfortunately what Newlands says is no use to Spinoza here, since it clearly appeals to *Barrier* at crucial points, and can thus not justify it without circularity.[73]

Finally, as *Deviance* shows, Spinoza develops his skeptical problem only after stipulating the intelligibility of *Interactionism*, in [A], for the sake of argument. That is, Spinoza initially allows the *prima facie* intelligibility of the Cartesian position, subject to a careful examination of its consequences. Of course, having developed his skeptical objection and having concluded that rejecting *Interactionism* for *Barrier* contributes to its resolution, as he does in the *Ethics*, Spinoza is then free to label the Cartesian view unintelligible in EVPref. But he *earns* this view with the rule following paradox analogue in the *Short Treatise*; he cannot simply help himself to it. So the central disagreement between my interpretation and Hübner's concerns what exactly the argument for the unintelligibility of *Interactionism* is, and whether it results from sustained meditation on the intractable skeptical problems raised in the *Short Treatise*, or whether by contrast it is posed late in the *Ethics*, outside its justificatory structure, and without explicit argument.

Interestingly, echoes of the *Deviance* passage from the *Short Treatise* do show up in the parts of Part V Preface that Hübner doesn't cite. Descartes's views on the connection between the soul and pineal gland come in for sustained mockery there, and Spinoza mixes in a number of different criticisms. Spinoza argues, for instance, that Descartes got the anatomy wrong: 'this gland is not found to be so placed in the middle of the brain that it can be driven about so easily' (EVPref, II/280, 17–19). He also repeats Hübner's charge of unintelligibility in different ways. But in the midst of all that, some of his rhetorical questions take on new meaning in light of the *Short Treatise*. Most clearly, Spinoza says: 'I should like very much like to **know how many degrees of motion that Mind can give to that pineal gland.** . . . For I do not know whether this gland is driven about more slowly by the Mind than by the animal spirits, or more quickly' (EVPref, II/280, 4–7, emphasis added). How many degrees of motion indeed? Why can the Mind 'not move all other bodies where it will,' as *Deviance* asks? Spinoza's focus on the *extent* of the mind's control over the pineal gland, and its competition with animal spirits for its manipulation, seems to refer, however obliquely, to the sorts of considerations the *Short Treatise* develops and responds to at greater length.

5.

In this paper, I have argued that *Barrier* is an ineliminable plank in the arguments for all Spinoza's major conclusions in the *Ethics*. An unnoticed passage in the *Short Treatise* states an instance of a skeptical problem that parallels Leibnizian and Wittgensteinian rule following paradoxes in various respects, from which I constructed an argument for *Barrier*. I then argued that reflection on the issues raised by the *Short*

Treatise both better grounds *Barrier* and more clearly explains Spinoza's fundamental motivations for believing it than those considerations offered by other recent interpreters. I close with some outstanding questions. Can Spinoza really show that the rule following paradox is strictly worse for *Interactionism*, and that it does not arise for Spinoza's own view?[74] The dialectic is tricky here, but I do think it is insufficient simply to claim that *Interactionism*, in the Cartesian sense, cannot be what gives rise to the skeptical paradox, simply because other views do so also. For it may be that even non-Cartesian or ostensibly non-interactionist views, for example property dualist views, have problems that mirror those Spinoza identifies with *Interactionism* in key respects. That would make these shared central features, whether present in full-blown substance dualism or in nearby views, responsible for generating skeptical problems. And what follows from the fact that Spinoza's necessitarianism seems to cause problems for normativity in general, and thus for epistemic normativity in particular.[75] If Spinoza's only answer to the justificatory questions about the truth of our causal claims concerning the limits of the mind's activities is that what is the case is necessarily so, does that really provide sufficient justification? If not, how should that affect our interpretation of the argument for *Barrier*? These are difficult issues, to be sure. But I hope to have shown that Spinoza's barrier between the attributes, as given in EIp10, can be defended surprisingly well using the resources of Spinoza's texts, to an extent far greater than even many of his most sympathetic interpreters have supposed.

Notes

[1] Quotations from the *Ethics* are given by book, proposition or demonstration, etc., and number, as in EIp4, EIp10s, etc, as is traditional, from Spinoza (1985).

[2] For a non-exhaustive list of EIp10's role in substance monism, see Della Rocca (2002; 2008; 2011) and Garrett (1979; 2018); for parallelism and/or mind-body identity, see Curley (1988), Della Rocca (1991; 1996; 2008), Gueroult (1968), Hampshire (1969), Jarrett (1991), Koistinen (1996), Marshall (2009), Odegaard (1971); for individuating subjects, see Borcherding (2016), Peterman (2019), Renz (2011; 2017).
[3] For EIp10's role in epistemology and in Spinozist responses to skepticism, see Perler (2017), Peterman (2018), Schneider (2016), and Steinberg (2009). Finally, for human ignorance of other attributes, see Bennett (1984) and Melamed (2013b), both following up on Spinoza's correspondent Tschirnhaus, who originally expressed the puzzle.
[4] Kripke (1982) notes numerous connections between Wittgenstein's argument and other philosophical problems. He also sees 'the private language argument' as a species of the genus of rule-following paradoxes (Kripke 1982: viii). Similarly, I see contemporary work on the causal pairing problem for dualism, cited later, as a species of the genus of Spinoza's problem about attribute independence.
[5] In this paper, I use 'conceived through' and 'caused by' as the verbs corresponding to conceptual and causal relations, respectively. As I state above, 'conceptual' relations exhaust **all** other non-causal forms of dependence discussed by contemporary philosophers, such as 'explanatory dependence' or 'ontological dependence' more generally. But ultimately, I think Spinoza ends up *identifying* all causal and non-causal forms of dependence into a single relation, as Newlands (2018) argues. See Newlands (2018: 57–59) for a partial catalog of the myriad terms Spinoza uses to discuss types of metaphysical dependence, and Newlands (2018: 57–89) for the extended argument in favor of identifying all relations of metaphysical dependence in Spinoza's ontology, such that every dependence relation is identical to every other, and for the claim that all dependence relations are ultimately conceptual, a view he calls 'Conceptual Dependence Monism.' Della Rocca (2008; 2012) basically appears to endorse Newlands's view, whereas Laerke (2011: 449) and Francesca Di Poppa (2013: 306, 317) both seem to think causal relations are more fundamental than other sorts of relation. Finally, Melamed (in 2013a; 2013b and elsewhere) has raised issues for identifying inherence relations with causal and conceptual relations. I will accept Newlands's and Della Rocca's views on dependence relations without defending them, since they have done so ably and at length elsewhere.
[6] Thus, while I say that EIp10 entails *Barrier*, this is primarily because I mostly ignore, with few exceptions, attributes other than Thought and Extension here. But these other attributes are essential to Spinoza's overall system. Thus, the entailment relation here is from EIp10, as a general claim about the relationships between any two attributes, and *Barrier*, which just restates EIp10 within the realms of Thought and Extension. EIp10 says that each attribute of substance must be conceived through itself, and *Barrier* exemplifies the meaning of EIp10 as applied to Thought and Extension; namely, that the mental and the physical can neither be caused nor conceived through each other. This is so because, as I note in the note immediately above, I side with those interpreters who identify causal and conceptual relations in Spinoza. Thus, there is a version of *Barrier* for every two of the infinitely many attributes, and this conjunction exemplifies the meaning of EIp10, but strictly speaking EIp10 and *Barrier* have identical content within the realms of Thought and Extension.
[7] See Aquila (1978: 275), Bennett (1984: 19.2), Della Rocca (1996: 10; 2002: 18; 2008: 43), Jarrett (1991: 466–69), Melamed (2013a:84), Newlands (2012: 41), Shein (2009: 1.3.1), Steinberg (2000: 33), Taylor (1937: 150), and others. Koistinen (1996) dissents. This list is taken from Hübner (2019: 4), whose formulation of *Barrier* inspires mine here, primarily to facilitate mutual engagement between our two projects, despite their substantial differences. However, I think it's important to indicate causal and conceptual isolation explicitly for my purposes here. I stick with *conceptual* relations, rather than Hübner's *explanatory relations*, because I think that explanatory relations can be causal or conceptual depending on the context, for Descartes at least, even if for Spinoza causal and conceptual relations have a tighter relationship.
[8] Said otherwise, I assume that Spinoza and Descartes agree either that non-causal conceptual relations and causal relations exhaust the sorts of dependence relations there are and that attributes are conceptually independent of each other, or that whatever other sort of dependence relation there might be can be deconstructed into its causal and non-causal components. I take Schechtman (2018) to have shown, in her paired sections on Descartes and Spinoza, respectively, that what I'm calling non-causal conceptual independence of the attributes of substance is indeed common ground.

[9] Here I assume that interactionists do not accept upward (body to mind) causation without downward (mind to body) causation, or vice versa. Thus I will sometimes oversimplify and say that *Interactionism* is the rejection of *Barrier*. Strictly speaking, *Interactionism* is the denial of EIp10 as commonly interpreted, that is, that every attribute is both causally or conceptually independent, whereas since *Barrier* is stated as a conjunction, one might deny it by rejecting either conjunct. But since Spinoza's actual opponents are two-way interactionists, I focus on that position here.

[10] For if Descartes accepts *Conceptual Independence* and *Correlation*, then he would infer *Causal Independence*. But he accepts *Interactionism*, denying *Causal Independence*. So he denies *Correlation*. Schechtman (2018) discusses things in almost exactly these terms, as a disagreement about *Correlation*. I discuss her view in the final section.

[11] Newlands (2011a; 2011b) surveys historically influential and recent idealist readings of Spinoza, and Newlands (2012) and Melamed (2012a) both single out Della Rocca's (2008; 2012) idealist reading as especially worth combatting. Hübner (2019: 2) notes at least the following examples of materialist readings: Ayers (2007: 76), Barker (1938: 159), Bennett (1984: 30.2), Curley (1988: 74–75, 78), Koistinen (2009: 168–69, 182), Malinowski-Charles (2010: 126), Matson (1971: 577), Nadler (2008: 597), and Rice (1999: 41–42).

[12] Hübner (2019: 3, emphasis in original); in recent work, Melamed (2015: 286) has hinted that ambiguities in Spinoza's conceptions of Substance and Attribute persist well into the period of the *Ethics*, and that perhaps the differences between the attributes may be merely conceptual, as opposed to real. I am interested by this suggestion, but would need further elaboration of this idea to evaluate how it would change the argument I propose here.

[13] It is true that EIp10 is not cited in the defense of substance monism, except as evidence for EIp12–13. However, as Della Rocca (2002; 2008; 2011) and Garrett (1979; 2018) both argue at length, EIp10 is needed to block a devastating objection to the argument as stated.

[14] He gives this argument in Della Rocca (2011). Since I believe other arguments are more directly relevant to the line of reasoning I give in this paper, I will not be discussing Della Rocca's argument in detail. I want to say briefly why not. First, according to Della Rocca (2011: 17, 19) the two claims on which his argument is based are: 1) **PSR**, that every fact has an explanation, and 2) **Explanation**, that to explain F is to conceive F as X, as having a certain feature X, such that there is no bare conceiving. It is clear from his exposition that he is presupposing two views he defends in other works, one of which I accept and one of which I reject. The one I accept is that for Spinoza the relations of conceiving, explaining, inhering, and causing are the same relation; this identity allows Della Rocca to run his argument solely in terms of conceiving or explaining. However, as I note at several places below, I think that the textual arguments given in favor of this identification, by Della Rocca and those who agree with him, of these apparently various dependence relations *presuppose, and thus cannot be used in an argument for*, *Barrier*. The one I reject is that the PSR—that every fact has an explanation—requires that such explanations be accessible to us as human knowers, either actually or in principle. As I discuss below, Spinoza's argument in the *Short Treatise* develops a class of skeptical scenarios that are compatible with the truth of the PSR, precisely because the PSR, as I interpret it (Della Rocca disagrees) lacks any immediate epistemological upshot for knowers like us. If the *Short Treatise* argument I discuss is correct, then on the assumption of Interactionism, *any pattern* of finite modes, whether within or across attributes, can be necessitated, caused, and explained by a complex-enough rule in conformity with PSR. Finally, taking *conceiving* as fundamental for Spinoza and arguing as if the truth of the PSR guarantees explanations accessible to human minds in particular gives Della Rocca's overall argument a distinctively idealist flavor. This, to be clear, is a consequence Della Rocca accepts, noting (2012: 15–16, emphases added) that his arguments 'put pressure on Spinoza to go somewhere he may not want to go, to a place, that is, **where any distinction among the attributes is undermined and to a place where idealism**—of a kind different from any we have seen already—**may hold**.' But as Newlands (2012) and Melamed (2012a; 2013b) both emphasize, one cannot argue for *Barrier* in order to reconstruct an idealist Spinozism! *Barrier* is precisely Spinoza's bulwark against both idealism and materialism, as I argue in the main text. In any case, my aim is to develop a Spinozistic argument for Barrier that informs a *consistent* reading of his overall system, something that Della Rocca's argument, by his own admission, does not deliver.

[15] Though Spinoza engages at some length with skepticism in the *Treatise on the Emendation of the Intellect*, I do not discuss this work, or recent discussions of it in the literature, here at all. This is not for lack of interest, but for three further reasons. First, Spinoza's arguments against (primarily Cartesian) skepticism in the TIE, if taken on their own terms, are not, I think, very convincing at all. Viljanen (2020) finds them substantially more compelling than I do, and his approach is to some extent different than previous interpreters, although I think it shares some of their defects (namely, insistence that Spinoza's epistemological methodology is the correct or only one, *contra* the skeptic, which I find to be dialectically ineffective against the skeptic here). Second, I think that the sort of skeptical problem I identify here remains even if one (somehow) solves the Cartesian skeptical problems Spinoza discusses in the TIE. Third, given reasons of space, as well as the fact that I think other interpreters have ably discussed Spinoza's early engagement with Cartesian skepticism, I felt it best to devote the majority of my attention to the form of philosophical skepticism I identify here for the first time, one with deep connections to other central doctrines in Spinoza's system. This is another crucial contrast with Viljanen (2020: 131), who specifically identifies engagement with the TIE's treatment of skepticism as advantageous *because* 'its arguments can be evaluated without taking a stand on the large-scale philosophical system Spinoza later develops.' Needless to say, this is directly opposed to the strategy I pursue here. For some contemporary discussion of Spinoza's engagement with the TIE, see Bennett (1984), Bolton (1985), Della Rocca (1994), Doney (1971), and Perler (2017), among others. For my extensive defense of the first two claims I make here, including discussion of all the foregoing authors, besides Viljanen (2020), see Rauschenbach (2018: 71–141).

[16] All quotations are from Spinoza's *Short Treatise on God, Man, and His Well-Being* and will be denoted using KV and the associated Gebhardt pagination.

[17] As before, I ignore the complication that *Barrier* is expressed as a conjunction, such that embracing so-called upward (body to mind) causation without downward (mind to body) causation, or vice versa, would constitute its rejection. Since Descartes, his primary interactionist interlocutor, appears to accept both, I'll oversimplify and speak as if *Interactionism* were the denial of *Barrier*. Moreover, as we'll see from the passage itself, Spinoza's examples are general enough to work against interactionists.

[18] For statements that seem to respect *Barrier*, see (*KV* I/91, 10–14, emphasis added), where Spinoza argues: 'And such are these two modes in bodies [motion and rest], that **there can be no other thing which can change them, except themselves.**' Here, nothing but the extended modes of motion and rest are capable of affecting bodies, thus seeming to exclude a mind's changing a body. In (*KV* I/98, 24–36), Spinoza appears to endorse the mind-body parallelism of the *Ethics*, saying: 'And because this body has a proportion of motion and rest, which is determined and continually changed by external objects, and because no change can occur in the object, unless the same thing also actually occurs in the Idea, the result is that people have reflexive ideas. I say "because it has a proportion of motion and rest," because no action can occur in the body without the two concurring.' I use Wolf's (1910: 129) translation here, since he is much clearer than Curley. But even the last line seems to slip, since it suggests that it is *because* there is a change in the object that there is a change in the idea, which, were it a cross-attribute explanation, would violate *Barrier*.

[19] Additionally, the *Short Treatise* (*KV* I/91, 22–24, emphasis added) seems to suggest that bodily motions causally result from perceptions: 'But **according to what we perceive in ourselves**, it can indeed happen that a body which is now moving in one direction comes to move in another direction.' And there are many other such examples.

[20] Compare Descartes Sixth Meditation (CSM II 56): 'Nature also teaches me, by these sensations of pain, hunger, thirst and so on, that I am not merely present in my body as a sailor is present in a ship, but that I am very closely joined and, as it were, intermingled with it, so that I and the body form a unit.'

[21] There is clear contemporary consensus that Wolf is wrong on this point, which includes Carriero (2015: 180, fn. 29–30), Garber 2015: 128–29), Jaquet (2018: 47–48), and Marshall (2015: 133, fn. 1), at least.

[22] Garber (2015: 128–32) discusses this passage at length, but his focus is almost exclusively on the question of where in the Dutch Cartesian literature Spinoza first encountered the view that the mind was only capable of redirecting motion in bodies, rather than causing new ones, and to what extent this narrow aspect of the criticism is successful. Though Garber (2015: 132) does conclude with the tantalizing suggestion that the *Ethics* contains traces of the same Dutch Cartesian heritage he identifies here, he does

not flesh this out further. Moreover, as is clear from how I argue here, I think that Spinoza must reject *Interactionism* in the *Ethics*, and has good reasons to do so.

[23] Jaquet (2018: 47–48, fn. 3–4) discusses this passage and similar ones, using them to note both that Spinoza's basic orientation in the *Short Treatise* 'remains in part Cartesian,' and also that 'Spinoza nevertheless continues to accept the idea of reciprocal action of the soul on the body and vice versa. In the *Short Treatise*, Spinoza is therefore partly subject to the very critiques he would later elaborate in Part III of the *Ethics*.' While her later conclusions deviate from my own, Jaquet and I appear to agree about several fundamental aspects of the problem of interactionism in Spinoza's early work.

[24] Whether Spinoza's interlocutors, most notably Descartes, can adopt something like this strategy on their own terms will be discussed in the fourth section.

[25] To repeat, *KV* (I/98, 24–36, original emphasis) reads: 'And because this body has a proportion of motion and rest, which is determined and continually changed by external objects, and because no change can occur in the object, unless the same thing also actually occurs in the Idea, the result is that people have reflexive ideas. I say "**because** it has a proportion of motion and rest," because no action can occur in the body without the two concurring.' As noted above, this view is not actually *Barrier*, but only a close approximation, since the last clause states an explanatory relation between the changes in the body and in the mind, and strictly speaking *Barrier* precludes such relations.

[26] Elizabeth continues by pointing out that propelling the thing moved requires either contact forces or extension to occur, and minds have neither.

[27] As we will see in the final section, Spinoza's just-quoted argument in EVPref, which seems to just express the traditional interaction problem, is often taken to be his primary reason for rejecting Cartesian interactionism. This causes confusion, since it seems to just assert that mental-physical causation is unintelligible without argument. But, as my reading makes clear, he argues for, rather than assumes, this.

[28] See, for example, Della Rocca (2007) and Hübner (2019: 5).

[29] See, for example, Garber (2001: 133–67; 2015: 128–29). Central to Leibniz's objection to Cartesian conservation laws is that the preservation of the quantity of motion is insufficient, and thus Descartes's solution—to limit the mind to redirecting preexisting motions, rather than causing new ones—fails, precisely because the quantity and direction of motion must be conserved. Leibniz defends what we now describe as the classical conservation laws of energy and momentum.

[30] I disavow any intent to actually defend Kripke's interpretation of Wittgenstein *as an interpretation*. However, since Kripke draws out many of the connections between the general rule-following paradox and other problems in philosophy more overtly than Wittgenstein himself does, his exposition is most relevant for my purposes. I am doing Spinoza interpretation, not Wittgenstein exegesis.

[31] Kripke (1982: viii, 115, 126–27, emphasis added); introducing the pairing problem, Kripke asks: 'And do we know what relation is to hold between a "mind" and a physical object that constitutes "having"? Suppose a given chair "has" a mind. **Then there are many "minds" in the universe, only one of which a given chair "has." What relations is that "mind" supposed to have to the chair, that another "mind" does not?**' Compare Kim (2007: 76), who considers two agents willing and raising their hands in synchrony, and asks: 'So why is it not the case that Smith's volition causes Jones's hand to go up, and that Jones's volition causes Smith's hand to go up?'

[32] *KV* I/19, 5–6 states that God is 'we say, a being of which all, or infinite, attributes are predicated, each of which is infinitely perfect in its own kind.' Spinoza retains this view in EId6: 'By God I understand a being absolutely infinite, i.e. a substance consisting of an infinity of attributes, of which each one expresses an eternal and infinite essence.'

[33] Of course, appearances might be misleading. But here are three reasons the infinite attribute version seems worse. First, there are far more modes, and thus more possible deviant causal chains. Second, popular solutions to Wittgenstein's problem, for example dispositional solutions, are more plausible to the extent that we can better describe the natures of the bearers of the relevant dispositions. We can do this to some extent for Spinozistic minds, but the other attributes and their modes are wholly unknown to us (*KV* I/27, 11–13). Third, and related to our ignorance of the other modes, we have no sciences of the other attributes that correspond to psychology and physics, respectively, and this need for a scientific approach, as Jaquet (2018: 35–37) and I both argue, is crucial to Spinoza's project.

[34] Foster (1968) begins the contemporary discussion; see also Foster (1991) and Tooley (1990). Bennett (2007) and Kim (2007) both push the pairing problem as an issue for dualism, while Audi (2011), Madell (2010), and Unger (2004; 2007) respond on behalf of dualists.
[35] This is one of the most controversial aspects of Kripke's interpretation of Wittgenstein, as many of the essays in Miller and Wright (2002) make clear. I'm obviously not defending Kripke's reading here, but the terminology of 'straight' solutions, which dissolve the paradox by denying some premises that give rise to it, and 'skeptical' ones that admit that the constitutive and justificatory challenges cannot be met, can help organize our thoughts on the Spinozist solution we discuss here.
[36] Kripke (1982: 120) considers Malcolm (1971), which makes this charge.
[37] Renz (2017) also sees Spinoza's argument for the individuation of finite subjects as Kantian, so our readings are similar in some ways, and she even discusses the pairing problem (2017: 207) and a skeptical scenario (2017: 214) explicitly. But her texts are the crucial EIIp11 and EIIp13, which are deduced indirectly from *Barrier*, and thus the 'transcendental' argument she attributes to Spinoza is more narrow than, and derivative from, the one here. Borcherding (2016: 251) follows Renz (2017) closely, and argues that 'the only route open to Spinoza' to motivate the claim that our mind bears an intentional relationship to our own body, and not to external bodies, is to rely on our subjective phenomenal experience. I do not deny that Spinoza often relies on claims from our subjective experience, like the interpreters Borcherding criticizes. But I take my reading to have shown that Borcherding's explanation is not the only one, or the most fundamental. And I also deny that reliance on our subjective experience is sufficient. First, not everyone's subjective experience is consistent in the way Borcherding suggests (e.g., schizophrenics who believe that another's thoughts are being projected into their minds). Second, our experience of unity is not at all guaranteed into the future *if mere past experience is the only ground of our belief in mind body unity*. These two reasons strike me as quite problematic for any attempt to use 'our' subjective experiences to do too much metaphysical work for Spinoza.
[38] See, for example, Kant (1998: B367–B595).
[39] One might think that speaking of Thought as 'inner' and Extension as 'outer' is just a metaphorical or confused understanding an agent might have, or alternatively might think that this application of the language of 'inner' and 'outer' is merely my own idiosyncratic, metaphorical application of the terms to Spinoza's system, which, with *Barrier*, has no genuine room for them. On the latter point, I think it's particularly worth noting that Karl Jaspers (1966: 10) sees these concepts as both appropriate in, and fundamental to, Spinoza's thought: 'What we know of the one substance we know through its attributes, thought and extension. Everything we experience is either the one (from inside) or the other (from outside).' One might disagree with his interpretation, of course, but I do not think the meaning of these terms is so transparent that they obviously *do not* map onto Thought and Extension in Spinoza's system.
[40] Spinoza's tantalizing addition, that he 'cannot explain this here,' of course fits nicely with my interpretation, on which the argument for *Barrier* plays a crucial role in Spinoza's thought but very little (though not zero) explicit part in the text of the *Ethics*. This is, obviously, only my suggestive interpretation, rather than the claim that Spinoza specifically has my concerns in mind here.
[41] See, for example, all the citations given in note 7 of those who endorse *Barrier*'s central importance.
[42] Of course, the talk of souls moving bodies here is not quite consonant with that of the *Ethics*, where *Interactionism* is strictly prohibited and no *explanatory claims of any kind, conceptual* or *causal*, involve modes of different attributes. As already discussed, Spinoza seems to realize that these limited interactionist exceptions cannot remain by the time of the *Ethics*.
[43] Stock (1988) is the only example I'm aware of that applies Wittgenstein's rule following considerations to the early modern period, albeit for different purposes than I do. As I argue, however, this is a natural move.
[44] This is central to my disagreement with Della Rocca's (2011) derivation of *Barrier* from the PSR.
[45] Of course, if one stipulates that the PSR's reasons and causes must be both intelligible to, and the most natural for, human beings, then this misunderstanding of the problem becomes harder to avoid. But note that neither Leibniz, as he makes clear in the continuation of the *Discourse on Metaphysics* section quoted, nor Spinoza in the *Ethics*, make this stipulation. Indeed, they both seem to deny it.
[46] Of course, I should note that Jaquet (2018: 143) goes on to argue that for Spinoza, 'that is why the discourse regarding the body's affects is always mixed.' While Jaquet argues convincingly that Spinoza

does in fact employ a mixed discourse in the later books of the *Ethics*, I am still somewhat unclear what the status of this mixed discourse is, in part because I remain uncertain that Spinoza can accomplish his goals of examining the affects as a natural philosopher, that is as a scientist, within the mixed discourse, as opposed to remaining exclusively within the mental or, more likely, exclusively within the physical, at least for any one explanatory question.

[47] Spinoza's position contrasts starkly here with some contemporary discussions that appear friendly to Spinoza's view but do not want to preserve the absence of explanatory relations that Spinoza finds essential. For instance, Chalmers (1996: 284–86, emphasis added) writes: 'Whenever we find an information space realized phenomenally, we find the same information space realized physically. And when an experience realizes an information state, the same information state is realized in the experience's physical substrate. . . . Principles concerning the double realization of information could be **fleshed out into a system of basic laws connecting the physical and phenomenal domains**.' This last aspect—psychophysical laws connecting the two domains—is just what Spinoza thinks we cannot have.

[48] Of note, Jaquet echoes these points in both her Introduction and Conclusion, when she discusses the popularity of the Spinozistic model in contemporary neuroscience and biology more broadly, acknowledging its utility there while also taking to task Antonio Damasio, among others, for 'tend[ing] to give primacy to the body and sometimes [giving] in to the reductionist temptation all the while denying it' (Jaquet 2018: 155). One advantage of reflecting deeply on the relations between Spinoza's early work and the *Ethics*, for both Jaquet and me, is that it assists one in resisting either dualistic or physicalist reductionist tendencies. Renz (2015: 294–96) also focuses on overarching methodological questions, noting that on her view: 'The conceptualization of the mental does not simply depend on the metaphysical claims introduced in the first book. Furthermore, it has to do justice to certain basic phenomenological facts, such as the fact that "we feel that a certain body is affected in many ways" or the fact that "we know that we think." And the explanation of the cognitive processes, finally, has to be consistent with the basic assumptions of Spinoza's physics.' I find this attitude very congenial, at least as regards the claim about Spinoza's physical assumptions, although I am not sure that it necessarily leads away, as Renz (2015: 287) thinks it does, from the panpsychist mind-body identity view most prominent in the literature.

[49] Goff (2012; 2017; 2019) is perhaps the most explicit defender of an avowedly Spinozist view, what he calls cosmopsychism, in the contemporary literature, but there are others. Nonetheless, the argument developed here provides additional avenues, ones crucially grounded in Spinoza's texts, for connecting this new sort of skeptical challenge to recent discussions in the philosophy of mind. At minimum, Spinoza's system as a whole, when complemented by the skeptical argument I develop here, seems to provide very strong reasons for finding both contemporary physicalism, whether reductive or non-reductive, and contemporary dualism, dissatisfying. Rauschenbach (2018) discusses this claim at much greater length.

[50] I should note that Kripke (1982: 5) suspects '[that] to attempt to present Wittgenstein's argument precisely is to some extent to falsify it,' and I think the same might be true of the intuition given in *Deviance*. This is so not only because of Spinoza's terse, highly general formulation of the class of skeptical possibilities for mind-body interaction. The more foundational point comes through in Alison Peterman's sophisticated discussion of Spinoza and Descartes on skepticism. As I interpret it, *Deviance* challenges the interactionist as follows. Given attribute non-causal conceptual independence, how do you explain (the constitutive question) and justify (the justification question) the nonexistence of all sorts of skepticism-inducing causal relations between a soul and far-flung bodies other than that body most closely associated with that particular soul. However, as Peterman (2018: 348–49) notes: 'Skepticism is usually formulated as a question about the possibility of knowledge, but . . . actually Spinoza uses the word "cognitio", which is the word that is usually translated as "knowledge", in contexts that involve very different types of cognitive contexts and in contexts that do not involve truth or even adequacy. There seem to be no special constraints on what counts as *cognitio* besides having an idea. . . . Rather than a single distinction between what counts as knowledge and what fails to qualify, Spinoza proposes a hierarchy of kinds of *cognition*.' Likewise, Garrett (2017: 41–42) argues: 'Indeed he does not conceive of sound reasoning in formal terms at all. . . . Rather, he conceives of sound reasoning as a matter of powerful true ideas producing, through the power of Thought, other powerful true ideas.' Both Garrett and Peterman's observations give good reason for thinking that it will be difficult to formalize Spinoza's skeptical challenge in *Deviance*, as it has been difficult to formalize Wittgenstein's rule-following paradox, in a way

that makes smooth contact with knowledge-centric contemporary formulations of related issues. Still, connecting the central questions raised by *Deviance* more directly to contemporary philosophy of mind strikes me as a far more promising route for further development.

[51] As before, it must be remembered that in the terms of this paper, *conceptual* and *causal* exhaust available options for dependence relations, since my use of *conceptual* includes all non-causal options, such as explanatory or ontological dependence, discussed in the contemporary literature. So another way of phrasing *Interactionism* is as the thesis that these other sorts of dependence between the attributes are lacking, while causal dependence relations obtain.

[52] This supposition is a bit fanciful, but it is mostly true that, *Barrier* excepted, Spinoza's other major theses have received careful, albeit qualified, defense from able philosophers. For a detailed argument that Spinoza is a necessitarian, see Garrett (1991). For the argument that Spinoza is not a necessitarian, see Curley and Walski (1999). For the argument that Spinoza both is and is not a necessitarian, relative to different ways of conceiving of finite modes, see Newlands (2017).

[53] And between each two of Spinoza's infinite unknown attributes, though I ignore this subtlety now.

[54] Compare the move I make here with Della Rocca (2002) and Garrett (2018), who discuss a similar usage of EIp10 in the specific context of Spinoza's proof of substance monism.

[55] See Descartes (AT VII 141/CSM II 101), as well as the discussion in Newman (2019).

[56] See Bolton (1985), Della Rocca (2007), Doney (1971), Perler (2017), Peterman (2018), and Viljanen (2020) for some excellent samples of discussions of this sort.

[57] To be clear, I am here still referring to *KV* I/98, 24–36, discussed at length before.

[58] EIp4 gives Spinoza's ontology: 'Outside the intellect there is nothing except substances and their affections.'

[59] Garrett's principled exclusion of 'attributes' as candidate items in Spinoza's ontology gives yet another reason, beyond those listed before, for questioning Della Rocca's (2011) argument for *Barrier*. For that argument (Della Rocca 2011: 31–32) requires that the only possible reason for the non-identity of a substance S and a single attribute A, on the assumption, for *reductio*, that substance might have only a single attribute, be that S has many attributes, among which A is one, and thus A is one of many, while S is unique. This formal difference (i.e., being one of many vs. being unique) then explains their non-identity. But Garrett suggests a far simpler answer. S and A are not identical because S is a substance, and thus an item in the ontology, whereas A is an attribute, and thus a structure of the ontology. And this significantly complicates, and perhaps even undermines by itself, Della Rocca's argument.

[60] In EIp10s, Spinoza seems to argue that if attributes are not restricted to being self-explained and self-caused as substances are, then substance itself might fail to be self-explained and self-caused. There is more to say about this, but suffice to say that again, given the shared terminology with Descartes, his primary critic, who allows for finite substances, in addition to God as infinite substance, who clearly don't meet the most stringent criteria of self-explanation or self-causation given here, Spinoza cannot effectively undermine Descartes's view with *mere appeals to definitions*. I thank an anonymous reviewer for pressing me on this point, though I doubt that I have fully satisfied their worries on this point.

[61] Stetter (2019: 2) lays out the argument that I describe in the remainder of this paragraph.

[62] For the first point, see Stetter (2019: 15), and for the second, Stetter (2019: 2) as before.

[63] Stetter (2019: 2) contains both quotations, with my emphasis, although Stetter (2019: 15) repeats the same mistake, dropping the conceptually independent qualification in speaking of infinite attributes and the shifting onus of proof.

[64] Hoffman (1999: 270) puts the point succinctly: 'Indeed I am tempted to ascribe to Descartes the view that God is a simple substance with more than one principal attribute, none of which can be conceived independently of the others.' Melamed (2017: 98) observes: 'Another philosopher who seemed to ascribe to God infinitely many attributes (and with whom Spinoza was somewhat familiar) is none other than Descartes, who claims that God has "countless" attributes that are unknown to us.' Stetter (2019: 15), later on the same page where he drops the *conceptually independent* qualification, states that Spinoza is motivated by an 'irreducible philosophical conviction' about the nature of God, including his claim that God has infinite attributes (something Descartes can happily accept, as just stated) which express its reality or being 'and thus must be conceptually independent too,' reinstating the qualification but thereby making clear the weakness of Spinoza's inference here, taken all by itself. For much of the theological tradition

prior to Descartes, as well as Descartes himself, if Hoffman (1999: 270) and Melamed (2017: 98) are right, argued that precisely because infinite attributes belonged to one simple substance, they could not be wholly conceptually independent. But that does not mean that such theists would deny that, for instance, God's Wisdom and God's Goodness, to give a few examples, failed to express God's reality or being, simply because they (i.e., Wisdom and Goodness) are not entirely conceptually independent. Spinoza needs some reason for thinking that an attribute's expressing God's Being requires its conceptual independence, and Stetter does not give us this on his behalf.

[65] There is a slight qualification to make here, one that actually comes up but is only discussed quite briefly by Stetter (2019: 10). If for Descartes the human being as a substantial union of mind and body is itself a single substance, then perhaps Spinoza could rely on whatever view of substantial unity there is inherent in this account to argue that even though his God is a composite, relative to its infinite attributes, it is also a single substance, taken as a whole. This would be to side with Hoffman (1999) against his critics, like Rozemond (1998) for instance, who argue that the human being is not a unified substance in precisely this way. This is an interesting line for Spinoza to take against Descartes, and one that might strengthen Stetter's conclusions significantly. But, as I discuss in the body of the text, I still think it desirable to have a Spinozistic argument, based on the skeptical consequences of *Interactionism*, in addition to this sort of burden-of-proof shifting strategy. Still, if Stetter's position can be strengthened this way, our views might ultimately be more complementary than competing.

[66] Though I stipulate many of her claims about Spinoza here for the sake of argument, it is clear that we disagree about crucial Spinozist doctrines relevant to this discussion. Schechtman (2018: fn. 26), for instance, sides with Melamed (2012b) and Morrison (2013) against Della Rocca (2008; 2011; 2012), Newlands (2018), and me on the question of whether the relations of causation, inherence, and conception are identical, co-extensive but not identical, or neither. Since Schechtman claims that her argument is compatible with both sides of the debate, however, I will not discuss this issue in more detail here.

[67] Schechtman (2018: 13, fn. 39, fn. 51) appeals to *causa sui* at several crucial points.

[68] Compare the language used in discussing the case of being dependent and created ('when I turn my mind's eye upon myself' and 'I perceive that likeness, which includes the idea of God, by the same faculty that allows me to perceive myself') with those of discovering his nature as thinking ('What am I to say about this mind, or about myself?' [CSM II 22] and 'Which of all these activities are distinct from my thinking? Which of them can be said to be separate from myself?' [CSM II 19]).

[69] Hübner (2019: 5–7); see also Peterman (2019) for treatment of similar questions from a different angle.

[70] Hübner (2019: 5, original emphasis), citing EVPref: 'Of course, since there is **no common measure between the will and motion**, there is also no comparison between the power, or forces, of the Mind and those of the body.'

[71] Interestingly, Jaquet (2018: 31) also points out the oddity of this text's placement within the *Ethics*. But she returns from VPref only to Part III, when in reality, the issues as I see them begin foundationally with EIp10.

[72] To recall: Descartes (CSM I 298) asserts the conceptual independence of attributes. In Schechtman's terms, on Hübner's reading Spinoza would at this point have already required an additional argument for the conclusion that causation is an ontological dependence relation, one that is dialectically effective against Descartes.

[73] To be clear, I do think Spinoza has such an argument, for a view called Conceptual Dependence Monism (CDM) in the literature. The problem is just that it presupposes *Barrier*, and thus cannot justify it. See Newlands (2010a; 2018: ch.3) for extensive defense of CDM. Newlands (2010a: 477–78) provides an especially clear example of this dependence of CDM on *Barrier*. Morrison (2013) dissents from some aspects of Newlands's picture. But just note that rejecting the claim that conceptual independence → causal independence (i.e., *Correlation*) on other grounds simply *strengthens* my point here, which is that Spinoza is not entitled to *this argument, at this point*, against Descartes. Schechtman, of course, reconstructs Spinoza's argument slightly differently, in part because she disagrees with Newlands and me about CDM, and in addition argues that it rests on premises that Descartes can successfully resist. So Schechtman's reasoning is also of no direct use to Spinoza against Descartes here, on her own interpretation.

[74] Pruss (2006: 267–70) gives an argument from the possibility of certain skeptical scenarios for the PSR that parallels in several respects the deviant causal chains among attributes considered here. I think it can

be adapted to show that the skeptical problem is strictly numerically worse for *Interactionism*, but whether that is enough for Spinoza's purposes is another question. But there is, again, the fact that we lack an adequate science of Thought, which makes certain natural interactionist responses to Spinoza's problem less tenable.

[75] Newlands (2018: chs. 7–8) discusses the problem of normativity in Spinoza's *Ethics* in a way I find compelling.

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