

RESTRICTING SPINOZA'S CAUSAL AXIOM

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Spinoza's causal axiom is at the foundation of the Ethics. I motivate, develop and defend a new interpretation that I call the 'causally restricted interpretation'. This interpretation solves several longstanding puzzles and helps us better understand Spinoza's arguments for some of his most famous doctrines, including his parallelism doctrine and his theory of sense perception. It also undermines a widespread view about the relationship between the three fundamental, undefined notions in Spinoza's metaphysics: causation, conception and inherence.

Keywords: spinoza, causation, causal axiom, perception, parallelism, passions.

I. INTRODUCTION

One of the central axioms of Spinoza's *Ethics* is his causal axiom:

1a4 Cognition of an effect depends on, and involves, cognition of its cause.¹

According to the unrestricted interpretation, this axiom is about *every* type of cognition and *every* type of causation. Its proponents include Curley (1969: 124), Bennett (1984: 129), Wilson (1991: 149ff.), Della Rocca (1996: 11ff.), Lin (2006: 334ff.), Garrett (2009: 106–7), Newlands (2010: 476) and Melamed (2012: 381–2).

If the unrestricted interpretation were correct, then the causal axiom would have some implausible implications. For example, because Mount Washington's shape was caused by a glacier, this axiom would imply that all cognition of Mount Washington's shape, including all beliefs, memories and sensations, involves cognition of that glacier. This implication seems implausible. For thousands of years, people seem to have believed, remembered and seen that Mount

¹ *Effectus cognitio a cognitione causae dependet et eandem involvit.* I prefer 'cognition' to Curley's (1985) 'knowledge' because Spinoza sometimes talks about inadequate or confused *cognitio*, and while in English it is natural to talk about inadequate or confused cognition, it is unnatural to talk about inadequate or confused knowledge. I will otherwise rely on Curley's translations.

Washington had that shape without *ever* thinking about glaciers, let alone that particular glacier. Given the pivotal role of the causal axiom in Spinoza's arguments for his most famous doctrines, including theism, substance monism, necessitarianism and parallelism,² these implications cast doubt on the philosophical significance of the entire book. After all, it is easy to derive counterintuitive doctrines from counterintuitive axioms.

There are at least two ways of interpreting the causal axiom that avoid this result. The first restricts it to a certain kind of cognition, and the second restricts it to a certain kind of causation. While I'm sympathetic to both readings, the goal of this paper is to motivate, develop and defend the second interpretation, because, to the best of my knowledge, no one has considered it, let alone endorsed it. Nonetheless, it will be helpful to introduce both of them.

According to the first interpretation, the causal axiom is restricted to a certain kind of cognition: adequate cognition. An appealing feature of this interpretation is that the causal axiom wouldn't imply that *inadequate* cognition of Mount Washington involves cognition of that glacier. This is appealing because our cognition of Mount Washington is inadequate, and therefore the causal axiom wouldn't imply that our cognition of Mount Washington involves cognition of that glacier.³ Another appealing feature of this interpretation is that it would be easy to see why Spinoza might have expected his readers to accept the causal axiom. In particular, the causal axiom would then be a reformulation of the Aristotelian dictum:

We only think that we have knowledge of a thing when we know its cause. (Aristotle 350 BCE/1960: 94a20/209)

Many of Spinoza's predecessors endorsed versions of this dictum. For example:

Rightly do they say that *to know truly is to know by causes*. (Bacon 1620/2004: 11/2/201)

Now, since God alone is the true cause of everything which is or can be, it is clear that the best path to follow when we philosophize will be to start from the cognition of God himself and try to deduce an explanation of the things created by him. This is the way to acquire the most perfect cognition, that is, cognition of effects through their causes. (Descartes 1644/1985: 1/24/201)

² Ip11 is standardly understood as committing him to theism, and it is derived from 1a4 through 1p6c as well as through 1p4. 1p14 is standardly understood as committing him to substance monism, and it is derived from 1a4 through 1p11. 1p29 is standardly understood as committing him to necessitarianism, and it is derived from 1a4 through 1p26 and 1p25. Finally, 2p7 is standardly understood as committing him to parallelism and it is derived directly from 1a4. Additionally, he uses 1a4 to argue that there is a part of the mind that is eternal (5p23) as well as to ground his theory of perception (see 2p16, 2p17s and all the propositions between them). While there are some who deny these interpretations of 1p11, 1p14, 1p29, etc., they will still grant that these propositions are at the core of Spinoza's philosophical system, which ought to establish the importance of 1a4.

³ Cognition is inadequate if it is the result of perception or testimony. See 2p29s.

[S]cience is the knowledge of consequences, and dependence of one fact upon another.
(Hobbes 1651/1994: I/v/17/25)

These philosophers are all talking about the best kind of cognition. Within Spinoza's system, that's adequate cognition. Therefore, if the causal axiom were restricted to adequate cognition, it would be easy to see why Spinoza expected his readers to accept it.

This interpretation currently has few if any proponents. Following Wilson (1991: 141–2, 153), most contemporary scholars believe that this interpretation would invalidate two of Spinoza's subsequent demonstrations. In particular, Spinoza uses his causal axiom to establish that all cognition, including inadequate cognition, involves the nature of God.⁴ Spinoza also uses his causal axiom to establish that the human mind has sensory perceptions, and Spinoza thinks that sensory perceptions are an inadequate kind of cognition.⁵ Most contemporary scholars think that these arguments are valid only if the causal axiom is about both inadequate and adequate cognition.⁶

I think that these scholars are wrong. I think that these demonstrations are valid even if the causal axiom is restricted to adequate cognition. However, defending this first interpretation is a task for another paper. The goal of this paper is to motivate, develop and defend the overlooked possibility that the axiom is restricted to a certain kind of causation. I'm not sure which of the two aforementioned restricted interpretations is better. I'm just convinced that they are both better than the unrestricted interpretation.

According to the second restricted interpretation, the causal axiom is restricted to immanent causation, a kind of efficient causation.⁷ In order to distinguish immanent causation from other kinds of efficient causation, I need to introduce one of the most important relations in Spinoza's substance-mode metaphysics: inherence. The traditional example is that whiteness inheres in Socrates. As this example suggests, there are a number of similarities between inherence (paradigmatically, a relation between a mode and a substance) and instantiation (paradigmatically, a relation between a property and an object). However, there are also important differences, at least if we're working with

⁴ See 2p45.

⁵ See 2p16c1 and 2p29c, respectively.

⁶ Nadler (2006: 59) is the only contemporary philosopher that I can identify who endorses this interpretation. He does not address Wilson's (1991: 141–2, 153) objection. All the other philosophers who endorse this interpretation, such as Gueroult (1968: 96–7), seem to predate Wilson (1991).

⁷ See 1p16c1 together with 1p18. See also *Short Treatise* I/ii/2. For evidence that God efficiently causes himself to exist, see ep60, the combination of 1p16c1 and 2p4d, and the passages mentioned in Lærke (2011: 458).

the understanding of properties as universals.⁸ One important difference is that inherence is a kind of ontological dependence. In particular, a mode's existence depends on the continued existence of its substance, whereas a property's existence does not depend on the continued existence of any object. For example, even if you destroy every white thing, you still won't have destroyed the property of being white. Another important difference is that Spinoza claims that everything inheres in God, including glaciers, mountains and people.⁹ Thus, inherence doesn't always involve properties. I'll mention other important differences later.¹⁰

Following scholastic tradition, Spinoza uses inherence to distinguish two kinds of efficient causes (hereafter just: causes):¹¹

x is an *immanent cause* of *y* iff *x* causes *y* and *y* inheres in *x*

x is a *transitive cause* of *y* iff *x* causes *y* and *y* does not inhere in *x*.

According to Spinoza, there are at least three causes of Mount Washington's shape. The first cause is the glacier. Because Mount Washington's shape does not inhere in the glacier, this is an instance of transitive causation.¹² The second cause is Mount Washington, in that Mount Washington's essence is partially responsible for its shape. Because Mount Washington's shape inheres in Mount Washington, this is an instance of immanent causation. The third cause is God. Because Mount Washington's shape inheres in God, this is also an instance of immanent causation.

This example helps bring into focus two important features of how Spinoza thinks about causation. The first is that different causes aren't always independent. For example, God causes Mount Washington to have a certain shape. How? By causing the glacier to mould Mount Washington in that way. Therefore, we shouldn't think of God and the glacier as independent causes. Instead, we should think of one cause (the glacier) as an aspect of the other cause (God). Similarly, suppose you make a baby laugh by wrinkling up your face. We shouldn't think of you and your facial expression as independent causes of the baby's laughter; the baby's laughter isn't causally overdetermined. Instead, we should think of one cause (your facial expression) as an aspect of the other

⁸ I'm here restricting my focus to the seventeenth century. Some earlier philosophers, including Scotus, held that inherence is a relation between a substance and an accident, and they treated accidents as more substance-like than modes. For background and discussion see Pasnau (2011: chs 10, 11 and 13).

⁹ See 1p15.

¹⁰ For a more systematic characterization of inherence see Garrett (2002).

¹¹ See 1p18d, ep73, *Short Treatise* I/iii/2 and I/ii/10 second dialogue. See also Curley (1985: 80, fn 2) and Melamed (2006: p.44, esp. fn 10).

¹² Della Rocca (2008: 69) argues that effects always inhere in their causes to some extent. He'll therefore insist that the glacier is both a transitive cause and an immanent cause. Note that his argument depends on the unrestricted interpretation.

cause (you). Or, in Spinoza's terminology, we should think of the first cause (your facial expression) as a mode of the second cause (you).¹³ The second feature is that a thing is a cause of its own modifications, even if it didn't actively produce those modifications.¹⁴ For example, Mount Washington is a cause of its own shape, even though it was relatively passive in producing that shape. This makes sense when you reflect on the fact that Mount Washington retains its shape by resisting the pressures of other bodies, like falling raindrops and galloping goat hooves. Similarly, Socrates is a cause of his whiteness, and a car door is a cause of its dent.

With this background in place, let's more carefully state the unrestricted interpretation and the interpretation that I'm developing. According to the unrestricted interpretation, the causal axiom is equivalent to:

1a4^{I+T} Cognition of an effect depends on, and involves, cognition of its *immanent causes* and its *transitive causes*.

1a4^{I+T} implies that all cognition of Mount Washington's shape involves cognition of the relevant glacier. According to what I'll call the 'causally restricted interpretation', the causal axiom is equivalent to the weaker:¹⁵

1a4^I Cognition of an effect depends on, and involves, cognition of its *immanent causes*.

An immediately appealing feature of 1a4^I is that it does not have the same implication as 1a4^{I+T}. Instead, it implies only that cognition of Mount Washington's shape involves cognition of its immanent causes: Mount Washington and God. While not uncontroversial, the claim that cognition of Mount Washington's shape involves cognition of Mount Washington is quite plausible. It might help to keep in mind that Mount Washington's shape isn't a property that can be instantiated by other objects. It is a modification whose existence depends on the existence of Mount Washington. The claim that Mount Washington's shape involves cognition of God is more controversial, but that implication is due to Spinoza's surprising claim that everything inheres in God, rather than to the causal axiom.

I just introduced one motivation for the causally restricted interpretation: it avoids committing Spinoza to implausible consequences of 1a4^{I+T}. I'll say a bit more about this motivation in a moment. I'll then list three additional motivations in subsequent sections.

¹³ See 1p28d and 2p9.

¹⁴ See 2a1''.

¹⁵ Viljanen (2011) and Huebner (forthcoming) argue that formal causation plays a foundational role in Spinoza's metaphysics. They define formal causation as follows: *x* formally causes *y* if and only if *y* follows from *x*'s essence. An anonymous referee wonders why we don't restrict the causal axiom to formal causes instead of immanent causes. The problem is that, given how they define formal causation, formal causation is the *only* kind of causation. See Viljanen (2011: 44–5) and Huebner (forthcoming: subsection 4.3). Thus, this wouldn't be a genuine restriction of the axiom.

Despite all these motivations, one might still prefer the unrestricted interpretation because the causal axiom is not *explicitly* restricted to immanent causation and, in a book as carefully constructed as the *Ethics*, one would expect the author to be explicit about any restrictions on important axioms. While I grant that this is motivation for the unrestricted interpretation, in Section V I will argue that it is much weaker than it first appears.

Another reason why one might prefer the unrestricted interpretation is that one thinks that the validity of Spinoza's demonstrations depends on ra_4^{1+T} . To help undercut this objection, in Section VI I will provide alternative reconstructions of two of the most challenging demonstrations, his demonstration of 2p7 (the parallelism doctrine) and his demonstration of 2p16 (the foundation of his theory of sense perception).

I will conclude that the causally restricted interpretation is more attractive than the unrestricted interpretation. One of the reasons why this conclusion is potentially significant is that it would undermine a widespread view about the three fundamental, undefined notions in Spinoza's metaphysics: causation, conception and inherence. Many scholars argue that these three notions are coextensive, if not identical.¹⁶ These scholars use the unrestricted interpretation of the causal axiom as part of their arguments. In particular, they use it to establish that there is a conceptual connection between a thing and all of its causes, both transitive and immanent. My conclusion undermines this view about the relationship between conception and causation.

Let's briefly return to the first motivation for the causally restricted interpretation: unlike the unrestricted interpretation, it avoids committing Spinoza to the implausible claim that all cognition of Mount Washington's shape involves cognition of a certain glacier. A related benefit is that, unlike the unrestricted interpretation, it avoids committing Spinoza to the even more implausible claim that all cognition of Mount Washington's shape involves cognition of everything in the infinitely long causal chain leading up to the glacier's formation. The unrestricted interpretation commits Spinoza to this stronger claim because 'depends on' and 'involves' pick out transitive relations (in the logical sense of 'transitive'). This should be uncontroversial with respect to 'depends on'. With respect to 'involves', more background is required. Spinoza's term is '*involvit*'. As Gabbey (2008: 47, fn 10) points out, '*involvit*' is a technical term that the scholastics interchanged with '*implicat*', and we might reasonably translate both terms using 'implies'. Therefore, if cognition of an effect depends on and involves cognition of its recent causes, then cognition of that effect must also depend on and involve cognition of the causes of those causes, and so on down the causal chain. And that's even more implausible.

I've been stressing the implausibility of these consequences. But it's even more significant that Spinoza nowhere acknowledges them. One might

¹⁶ For example, Lin (forthcoming), Newlands (2010: 469) and Della Rocca (2008: 67).

speculate that he found them embarrassing. But that would be out of character, given that he fearlessly endorses other surprising consequences, including panpsychism and necessitarianism.¹⁷ Moreover, Spinoza could have tried to soften the implausibility of these consequences. For example, he could have argued that our cognition of the relevant glacier has very little power in our minds, and as a result we are unaware of the fact that we are thinking about a glacier. In a contemporary idiom: our cognition of the relevant glacier isn't fully conscious.¹⁸ The unrestricted interpretation leaves it mysterious why he never acknowledges or softens these immediate consequences of $1a4^{I+T}$.

There are three other motivations for the causally restricted interpretation. I will develop those motivations in the following sections (Sections II–IV). I will then consider potential objections (Sections V and VI).

II. SECOND MOTIVATION

The second motivation is that the causally restricted interpretation better explains why Spinoza doesn't acknowledge any disagreements about the causal axiom.

Let's start with some background. In the appendix to part one, Spinoza writes, 'I have taken care, whenever the occasion arose, to remove prejudices that could prevent my demonstrations from being perceived'. Spinoza is especially careful to remove Cartesian prejudices, which is why most of the scholia of part one address his disagreements with Descartes.¹⁹ One of those disagreements is about the definition of 'God'. Descartes would reject Spinoza's definition of 'God', because Descartes didn't think that God had infinitely many attributes. For example, Descartes didn't think that God had the attribute of extension.²⁰ Another of those disagreements is about the definition of 'free'. Descartes would reject Spinoza's definition of 'free', because Descartes thought that a being could be free even if it didn't exist by the necessity of its own nature.²¹ Spinoza acknowledges both of these disagreements in scholia.²²

Descartes would also reject $1a4^{I+T}$. In particular, Descartes makes two claims that together entail that $1a4^{I+T}$ is false. The first claim is that cognition of a body does not depend on cognition of a mind and vice versa.²³ The second

¹⁷ See 2p13s and 1p29.

¹⁸ Garrett (2008) develops this line of thought on Spinoza's behalf.

¹⁹ For example, see 1p8s, 1p10s, 1p13s, 1p15s, 1p17s1, 1p17s2 and 1p33s2.

²⁰ Descartes (1644/1985: I/23/200–1).

²¹ See Descartes (1641/1984: Fourth Meditation/39) and Descartes (1644/1985: I/6/194, I/14-5/197–8).

²² See 1p17s and 1p33s2. See also the discussion of 2d2 in 2p10s.

²³ See Descartes (1644/1985: I/53–4/200–1). He thinks that this is true of all really distinct substances: 'we can perceive that two substances are really distinct simply from the fact that we can clearly and distinctly understand one apart from the other' (Descartes 1644/1985: I/60/213).

claim is that minds and bodies causally interact.²⁴ Together, these claims entail that cognition of an effect does not depend on cognition of all its causes; we can think about an effect without automatically thinking of its causes. For this reason, Descartes' claims entail that $\text{ra}_4^{\text{I+T}}$ is false.²⁵ Therefore, if the unrestricted interpretation were correct, then Descartes would have rejected the causal axiom. As the author of a book on Descartes' *Principles of Philosophy*, Spinoza would certainly have known this.

The problem for the unrestricted interpretation is that Spinoza never acknowledges a disagreement with Descartes about the causal axiom. Keep in mind that the causal axiom is at the very centre of Spinoza's philosophical system. For example, as noted earlier, he uses it in his demonstrations of substance monism, necessitarianism and parallelism, doctrines that most if not all Cartesians would reject. Therefore, if the unrestricted interpretation were correct, then Cartesian readers had nothing to fear from Spinoza's arguments for his most famous doctrines.

If the causally restricted interpretation is correct, however, then there's no evidence that Descartes would reject the causal axiom. Consider that, even though Descartes doesn't talk about inherence in this context, he presumably would deny that minds and bodies inhere in each other, because he thinks that minds and bodies are distinct substances. In that case, the two claims listed above don't entail that ra_4^{I} is false.

Therefore, a second motivation for the causally restricted interpretation is that it better explains why Spinoza doesn't acknowledge a disagreement with Descartes about the causal axiom.

III. THIRD MOTIVATION

The third motivation is that, if Spinoza accepted $\text{ra}_4^{\text{I+T}}$, then we would expect there to be at least one place where he unambiguously says that all thoughts about a thing depend on cognition of that thing's transitive causes, but, I will argue, there is no such place. In addition, there's at least one passage in the *Short Treatise* where he seems to assume that $\text{ra}_4^{\text{I+T}}$ is false.

²⁴ See Descartes (1644/1985: IV/189/279–80) and Descartes (1641/1984: Sixth Meditation/55).

²⁵ There might be other reasons why Descartes would reject $\text{ra}_4^{\text{I+T}}$. For example, Descartes claims that cognition of one mode does not depend on cognition of any other mode (1644/1985: 213–214, 1/61). Descartes also seems to think that modes of the same substance causally interact, as when clear and distinct perceptions in the mind compel assent. See Descartes (1641/1984: Fourth Meditation/40). Others have noted that Descartes's claims are inconsistent with $\text{ra}_4^{\text{I+T}}$, though they don't use that inconsistency to motivate alternative interpretations of ra_4 . See, e.g., Wilson (1991: 144–6).

Let's start with the passage from the *Short Treatise*:

The freest cause of all, and the only most suited to God, is the immanent. For the effect of this cause depends on it in such a way that without it, [the effect] can neither exist nor be understood; nor is [the effect] subjected to any other cause. (*Short Treatise* II/xxvi/7)

Spinoza's conclusion is that immanent causes are freer than transitive causes. He lists three features of immanent causes: that a thing cannot exist without its immanent cause, that a thing cannot be understood without its immanent cause and that a thing does not have any other immanent causes. There would be no reason for him to list all these features unless each marked a difference between immanent and transitive causes, because otherwise it wouldn't support his conclusion that immanent causes are *freer*. Therefore, Spinoza seems to be assuming that a thing is understood only through its immanent cause, and not understood through its transitive causes—an assumption that contradicts $1a_4^{I+T}$. The *Short Treatise* is an early work, so it's possible that Spinoza abandoned this assumption before writing the *Ethics*. But there are enough continuities between the *Short Treatise* and the *Ethics* that we can use the *Short Treatise* as a defeasible guide to his views in the *Ethics*.

In contrast, he nowhere unambiguously commits himself to $1a_4^{I+T}$. The most promising passage is from the *Emendation*:²⁶

[O]ur ultimate end requires (as we have already said) that the thing be conceived either through its essence alone or through its proximate cause. If the thing is in itself, or, as is commonly said, is the cause of itself, then it must be understood through its essence alone; but if it is not in itself, but requires a cause to exist, then it must be understood through its proximate cause. For really, cognition of the effect is nothing but acquiring a more perfect cognition of its cause. (*Treatise on the Emendation of the Intellect* §92)

But this passage doesn't commit Spinoza to $1a_4^{I+T}$, because he's talking about a kind of cognition ("our ultimate end") that he elsewhere contrasts with the kind of cognition constitutive of perceptual experiences.²⁷ As a result, this passage demonstrates just that there is *some* kind of cognition of a thing that involves cognition of that thing's proximate causes, which falls short of what's needed.

IV. FOURTH MOTIVATION

The fourth motivation is that the causally restricted interpretation dissolves a puzzle about Spinoza's view of the passions. In particular, $1a_4^{I+T}$ implies

²⁶ See also *Treatise on the Emendation of the Intellect* §19; *Theologico-Political Treatise* ch. 4 par 4; ep60. Similar considerations apply to these passages.

²⁷ See *Treatise on the Emendation of the Intellect* §19.

that if an affection has transitive causes, then it is a passion, because affections are passions if they are conceived through something external. It is therefore puzzling that in 5p3 he claims that an affection can at some point in the future *cease* to be a passion. One wonders: How could an affection shed its transitive causes? That is: How could it stop being the case that an affection was produced by transitive causes? As Bennett (1984: 336) points out, that would be like becoming a royal by changing one's birth parents.

One response to this problem is to deny that Spinoza is committed to $1a4^{I+T}$. If the causal axiom is just equivalent to $1a4^I$, then Spinoza is no longer committed to the view that one must *always* understand an affection through its transitive cause. In particular, one might initially conceive of an affection through its transitive causes but then later stop conceiving of it in that way. An example might help. After a player of an opposing football team bruises one's leg, one might become angry. One might say to oneself something like, 'He caused my leg to bruise'. But perhaps, by thinking about the physiology underlying one's heart rate or the psychology underlying one's desire to retaliate, one might stop understanding one's affection through the opposing player. One might say to oneself something like, 'My heart rate exemplifies the immutable laws of physiology, and my desire to retaliate exemplifies the immutable laws of psychology'.²⁸ As a result, one's idea might stop representing the external player, eradicating one's anger toward him.²⁹ But this isn't possible if the causal axiom is equivalent to $1a4^{I+T}$. Consider that $1a4^{I+T}$ implies that one must *always* conceive of the injury through its transitive causes, and therefore one must *always* conceive of one's injury through the opposing player. As a result, a motivation for the causally restricted interpretation is that, if the causal axiom is equivalent to $1a4^I$, then the puzzle never arises. In particular, $1a4^I$ is consistent with the possibility that our bodies' affections sometimes are conceived through some of their transitive causes and other times are conceived through none of their transitive causes. $1a4^I$ is therefore consistent with the possibility that an affection can cease to be a passion.³⁰

²⁸ See Marshall (2012: 152ff).

²⁹ Here are some further details: the initial idea of my bruise is an inadequate idea of my leg (2p24), an inadequate idea of the opposing player (2p25) and an adequate idea of God (2p45). My adequate ideas are formed entirely through my own power, while my inadequate ideas are formed in part by external causes (3p1d). Therefore, the initial idea of my bruise is a passionate idea of my leg, a passionate idea of the opposing player and an active idea of God (3d1, 3d3). My idea subsequently ceases to be an idea of the opposing player, and therefore ceases to be a passionate idea of him. But it is still a passionate idea of my leg and an active idea of God. This illustrates two general points. First, an idea can cease being a passionate idea of x even if it is still an action or passion with respect to other objects. Secondly, an idea can cease being a passionate idea of x without becoming an adequate idea of x ; it can cease being a passionate idea of x by ceasing to be an idea of x .

³⁰ Some people think that the causal axiom is equivalent to a biconditional: x causes y if and only if cognition of y depends on and involves cognition of x . If it were, then the causally restricted

Notably, the causally restricted interpretation also provides a straightforward solution to related puzzles. For example, Spinoza says that we can attach affections to ideas of *additional* causes, and that this is one of the ways in which hate and joy can be destroyed.³¹ But that seems impossible if the causal axiom is equivalent to $\text{IA}_4^{\text{I+T}}$, because in that case affections are already attached to ideas of all their causes. Similarly, Spinoza says that we can separate affections from ideas of their causes, and that is also one of the ways by which hate and joy can be destroyed.³² But that seems impossible if the causal axiom is equivalent to $\text{IA}_4^{\text{I+T}}$, because in that case affections must be attached to ideas of all their causes.

We just listed four motivations for the causally restricted interpretation: that it doesn't have the implausible and unacknowledged consequence that our perception of Mount Washington involves cognition of a certain glacier and all its causes, that Spinoza doesn't acknowledge a disagreement with Descartes about the causal axiom, that Spinoza nowhere unambiguously commits himself to $\text{IA}_4^{\text{I+T}}$, and that restricting the causal axiom to immanent causes would solve a puzzle about Spinoza's account of the passions. Let's now consider objections.

V. FORMULATION OF IA_4

Here again is the causal axiom:

Cognition of an effect depends on, and involves, cognition of its cause.

In a book as carefully constructed as the *Ethics*, one would expect the author to be explicit about any restrictions in important axioms. Accordingly, one explanation for why Spinoza uses 'cause' rather than 'immanent cause' is that Spinoza intended the causal axiom to be interpreted as equivalent to $\text{IA}_4^{\text{I+T}}$.

However, there are two other, mutually supporting explanations for why Spinoza used 'cause' rather than 'immanent cause'. First, recall again the passage from the *Short Treatise*:

The freest cause of all, and the only most suited to God, is the immanent. For the effect of this cause depends on it in such a way that without it, [the effect] can neither exist nor be understood; nor is [the effect] subjected to any other cause. (*Short Treatise* II/xxvi/7)

Spinoza doesn't offer any support for his claim that things cannot be understood without their immanent causes or his assumption that things can be

interpretation would commit Spinoza to the view that our bodies' affections can be conceived *only* through their immanent causes. In Morrison (2013), I argue that the causal axiom is not equivalent to a biconditional.

³¹ See 3p48.

³² See 5p2.

understood without their transitive causes. Presumably he thought it was obvious. If so, he might have used 'cause' rather than 'immanent cause' when formulating the causal axiom because he didn't think that anyone would confuse it for a claim about transitive causes. It is worth keeping in mind that the distinction between immanent and transitive causation would have been familiar to his seventeenth-century audience, and they would have recognized them as kinds of efficient causation.³³

Secondly, he might have expected the *context* of the causal axiom to indicate that he is talking about immanent causation. Spinoza entitled part one 'Of God', and by definition God is a substance (see 1d6). It is therefore unsurprising that most of the surrounding axioms and definitions are about the nature of substances, the relations of substances to themselves and the relations of modes to their substances.

Let's go through the surrounding axioms and definitions one by one, starting with the definitions. The definitions of 'substance', 'attribute', 'mode' and 'God' don't require any commentary. Spinoza's definition of 'finite in its kind' is primarily supposed to distinguish God, an absolutely infinite substance, from what is either finite or merely infinite in its own kind (see 1d6). Cartesian readers would recognize that Spinoza's definition of 'self-caused' is about the nature of a particular substance, because, like Spinoza, they think that God is a substance and that he's the only being whose essence involves existence.³⁴ Cartesian readers would also recognize that Spinoza's definition of 'free' is about the nature of a particular substance, because, like Spinoza, they think that God is the only being that exists from the necessity of its own nature.³⁵ Last, Cartesian readers would recognize that the definition of 'eternity' is about the nature of a particular substance, because, like Spinoza, they believe that the definition of 'God' is the only definition that implies that something exists.³⁶

Let's now turn to the axioms. 1a1, 1a2 and 1a5 make claims about the relations that substances bear to themselves (they are in themselves and conceived through themselves) and about the relations that modes bear to their substances (modes are in them and conceived through them). Cartesian readers would recognize that 1a7 is about the nature of a particular substance for the same reason that they would recognize that Spinoza's definition of 'self-caused' is about that substance.³⁷

³³ See Curley (1985: 80, fn 2) and Melamed (2006: 44, esp. fn 10).

³⁴ Descartes (1641/1984: Fifth Replies/263; 1644/1985: I/14/178).

³⁵ See Descartes (1644/1985: I/51/210).

³⁶ See Descartes (1644/1985: I/14-15/197-198).

³⁷ While I believe 1a3 is also restricted to immanent causation, defending this claim would necessitate an extended discussion of 1p27d. Thus, due to space constraints, I'm focusing on the other axioms.

Most of the surrounding axioms and definitions were therefore recognizably about the nature of substances, the relations of substances to themselves and the relations of modes to their substances. They aren't about a substance's relations to other substances, nor about the relations among a substance's modes. Spinoza is trying to characterize a substance's intrinsic metaphysical structure. Within this context, it would be natural for Spinoza to focus on immanent causation, because if a substance causes itself to exist, then, by definition, it *immanently* causes itself to exist, and if a substance causes its modes to exist, then, by definition, it *immanently* causes those modes to exist. Accordingly, Spinoza might have expected the context to indicate that he is talking about immanent causation.

Of course, the state of contemporary Spinoza scholarship demonstrates that this expectation would have been overly optimistic. But, given how difficult it is to follow many of his derivations (e.g. 1p5d, 2p7d), it would not be surprising if here too Spinoza misjudged the transparency of his intentions.

Just to be clear: I'm not claiming that the context indicates that *God* is the immanent cause of everything. That's a claim that Spinoza doesn't establish until much later.³⁸ My claim is that Spinoza might have expected the context to indicate that he's talking about immanent causation, because by definition that's the kind of causation involved if a substance causes itself or its modes.

In light of these explanations, I think that the formulation of the causal axiom provides less decisive support for the unrestricted interpretation than is often assumed. In fact, I think that the formulation of the causal axiom provides *comparatively weak* motivation when compared with the motivations for the causally restricted interpretation.

Let's next consider whether the causally restricted interpretation is consistent with the way Spinoza deploys the causal axiom.

VI. DEPLOYMENT OF THE CAUSAL AXIOM

The two demonstrations that pose the greatest challenge to the causally restricted interpretation are Spinoza's demonstration of 2p7 (the parallelism doctrine) and his demonstration of 2p16 (the foundation of his theory of sense perception). In this section, I hope to show that there are plausible reconstructions of these demonstrations that require only ia_4^{I} .³⁹

My discussion of both demonstrations will follow the same pattern. I will first introduce a plausible reconstruction that depends on $\text{ia}_4^{\text{I+T}}$. I will then

³⁸ See 1p18.

³⁹ Spinoza deploys the causal axiom in seven other demonstrations: 1p3d, 1p6c1d2, 1p25d, 2p5d, 2p6d, 2p45d and 5p22d. Three of these demonstrations, 1p6c1d2, 2p5d and 2p6d, pose lesser challenges to the causally restricted interpretation. Due to space constraints, I'm focusing on the two demonstrations that pose the greatest challenge.

introduce a plausible reconstruction that depends only on $1a_4^1$. After considering some of the advantages and disadvantages of each reconstruction, I will conclude that neither reconstruction is significantly more plausible than the other.

VI.1 *Parallelism doctrine*

Here is 2p7:

2p7 The order and connection of ideas is the same as the order and connection of things.

In light of subsequent demonstrations, we can reformulate it:⁴⁰

2p7 If things are ordered and connected in some pattern, then the ideas of those things are ordered and connected in the same pattern.

Spinoza's demonstration of 2p7 is among his pithiest:

This is clear from $1a_4$. For the idea of each thing caused depends on the cognition of the cause of which it is the effect.

Spinoza claims that 2p7 is 'clear' from the causal axiom. It isn't. I will develop two equally plausible reconstructions of 2p7d, one of which requires $1a_4^{1+T}$ and the other of which requires only $1a_4^1$.

Let's start with the reconstruction that requires $1a_4^{1+T}$. We might roughly gloss this reconstruction as 'If one thing causes another thing, then, because there are ideas of both things, the causal axiom implies that the idea of the first thing causes the idea of the second thing. More generally, if things are ordered and connected in some pattern, then the ideas of those things are ordered and connected in the same pattern.' Here's a more precise reconstruction:⁴¹

- a₁ In God there is necessarily an idea, both of his essence and of everything that follows from his essence. (2p3)
- a₂ Everything follows from the necessity of God's nature. (by 1p16)
- a₃ Therefore, if one thing causes another thing, then there is an idea of the cause and there is an idea of the effect. (a₁, a₂)
- a₄ The idea of an effect depends on . . . the idea of the cause. ($1a_4$)
- a₅ Therefore, if one thing causes another thing, then the idea of the second thing depends on the idea of the first thing. (a₃, a₄)

⁴⁰ It might initially seem that 2p7 is a biconditional, but, as I argue in Morrison (2013: 11, 12), the first two sentences of 5p1d strongly suggest that it is a mere conditional, and given the way he uses 2p7 in subsequent demonstrations, the conditional must be in the direction indicated above. But even if 2p7 were equivalent to a biconditional, that wouldn't undermine any of the following analysis. It would just lengthen both reconstructions.

⁴¹ I'm following Spinoza by substituting 'idea' (*idea*) for 'cognition' (*cognitio*). In ep72 he restates both the antecedent and the consequent of $1a_4$ using 'cognition or idea'.

- a₆ Therefore, if one thing causes another thing, then the idea of the first thing causes the idea of the second thing. (a₅)
- a₇ Therefore, if some things are causally related in some pattern, then the ideas of those things are causally related in the same pattern. (a₆)
- a₈ Therefore, if all things are ordered and connected in some pattern, then the ideas of those things are ordered and connected in the same pattern. (a₇)

As indicated by Spinoza's use of 2p7 in 2p9d and 5p1d, the order and connection of things fixes which things are transitive causes of which other things. Therefore, this reconstruction, in particular the inference from (a₇) to (a₈), is valid only if each instance of 'cause', including the instance in the causal axiom, applies to transitive causation. Therefore, this reconstruction requires $\text{ra}_4^{\text{I+T}}$.

I grant that this reconstruction is plausible. But I think that there is another reconstruction that is equally plausible and that does not require $\text{ra}_4^{\text{I+T}}$. Before introducing that demonstration, it is worth pointing out that some additional work is required to fill in the gaps of this reconstruction.

First, the inference from (a₅) to (a₆) depends on the plausible assumption that Spinoza uses 'depends on' and 'causes' so that, if one thing depends on another, then the second thing causes the first thing.

Second, the inference from (a₅) to (a₆) might be questioned. Suppose that body *b* is a cause of body *b'*. Suppose that the idea of *b* is a cause of the idea of *b'*. It doesn't automatically follow that there's the same kind of causation in both cases. Perhaps *b* is a proximate cause of body *b'* while the idea of *b* is a remote cause of the idea of *b'*. Or perhaps *b* is an immanent cause of body *b'* while the idea of *b* is a transitive cause of the idea of *b'*. Additional work is required to fill in this gap.

Thirdly, the inference from (a₇) to (a₈) seems to depend on whether Spinoza uses 'order and connection' so that the order and connection of things is determined exclusively by their causal relations. That's plausible but not obvious.

I'm not pointing out these gaps because I think they are reasons to reject this reconstruction. I am pointing them out so that one will not be inclined to reject the next reconstruction just because some work is required to fill in its gaps.

We might roughly gloss the second reconstruction as 'God causes the totality of things that exist, and so, by ra_4 , there is a true idea of that totality. Because true ideas agree with their objects, the order and connection of things must be the same as the order and connection of ideas.' To make the reconstruction more accessible, I will use 'the universe' as a name for the totality of what he elsewhere calls 'infinitely many things in infinitely many ways'.⁴²

⁴² See 1p16.

Here's the second reconstruction:

- b₁ God's essence necessitates the universe. (by 1p16)
- b₂ There is an idea of God's essence. (by 2p1)
- b₃ The idea of an effect depends on . . . the idea of the cause. (1a4)
- b₄ Therefore, the idea of the universe depends on the idea of God's essence.
(b₁–b₃)
- b₅ Therefore, the idea of the universe is caused by the idea of God's essence.
(b₄)
- b₆ Therefore, the idea of the universe exists. (b₂, b₅)
- b₇ The idea of the universe is true.
- b₈ A true idea agrees with its object. (1a6)
- b₉ Therefore, the idea of the universe agrees with the universe. (b₆, b₇, b₈)
- b₁₀ If an idea agrees with its object, then: if the parts of the object are ordered and connected in some pattern, then the corresponding parts of the idea are ordered and connected in the same pattern.
- b₁₁ Each thing is a *part* of the universe.
- b₁₂ The idea of each thing is a *part* of the idea of the universe.
- b₁₃ Therefore, if all things are ordered and connected in some pattern, then the ideas of those things are ordered and connected in the same pattern. (b₉–b₁₂)

Spinoza calls the idea of the universe the 'infinite intellect'.⁴³ He also classifies it as a mode of God.⁴⁴ As a result, this reconstruction uses the causal axiom only to make an inference involving God's relationship to one of his modes—an instance of immanent causation—and so it requires only 1a4¹.

Let's now fill in the gaps. First, (b₂) follows from 2p1. Spinoza also takes (b₂) for granted in 2p4d, so it is likely that he would take (b₂) for granted again in 2p7d.

Second, the inference from (b₄) to (b₅) depends on the plausible assumption that Spinoza uses 'depends on' and 'causes' so that, if one thing depends on another, then the second thing causes the first thing. Recall that the first reconstruction relies on the same assumption.

Third, the inference from (b₂) and (b₅) to (b₆) just follows from the fact that if one thing causes another, and we know that the first thing exists, then we know that the second thing exists. For instance, from the fact that boiling water produces steam and that water is boiling, I can infer that there is steam. Spinoza often establishes that something exists by first establishing that it was caused. For instance, he first argues that God causes himself and then infers that God exists.⁴⁵

⁴³ See 1p16. See also 1p21d, 2p4d, *Short Treatise I/ii/14*–6.

⁴⁴ See 1p31d.

⁴⁵ See the use of 1p7d in 1p11d.

Fourthly, Spinoza would take (b₇) for granted. By definition, the infinite intellect is a mode of thinking.⁴⁶ Therefore, by definition, the infinite intellect is an idea, and Spinoza takes it for granted that all intellects, whether finite or infinite, are *true* ideas.⁴⁷

Fifthly, Spinoza would likely take (b₁₀) for granted. Consider a collection of things and a collection of ideas of those things. What could it mean to say that these collections *agree* if they didn't have the same order and connection? It might help to note that (b₁₀) doesn't entail that ideas have parts; if ideas don't have parts, then this is a vacuous constraint on true ideas.

Sixthly, Spinoza would take (b₁₁) for granted. We're using 'the universe' as a term for the totality of what in 1p16 he calls 'infinitely many things in infinitely many ways'. If the universe didn't include something, then the universe wouldn't be *infinite* in Spinoza's sense of 'infinite', because we could conceive of something greater.⁴⁸ Further, in 2l7s he takes it for granted that every body is a *part* of the infinite individual, and so presumably each thing is likewise a *part* of the universe (which includes both the infinite individual and the infinite intellect).

Last, Spinoza would likely take (b₁₂) for granted, because in 2p11c he seems to take it for granted that every idea is a *part* of the infinite intellect.

I think that this reconstruction is attractive. To start, if we're working within a Spinozistic framework, it's intuitive. Additionally, because he takes many of its premises for granted elsewhere in the *Ethics*, there is a plausible explanation for why he also fails to acknowledge them in 2p7d. Further, while one might worry about the number of premises in this reconstruction, that's a misleading indicator, because we can imagine him deriving 2p7 through a relatively simple line of reasoning, like the one glossed above: 'God causes the whole universe to exist, and so, by 1a4, there is a true idea of the whole universe. Because true ideas agree with their objects, the order and connection of things must be the same as the order and connection of ideas.'

Notably, the structure of this reconstruction does not *require* the causal axiom. In particular, one could replace (b₂)–(b₅) with 2p3 or even the combination of 2p1 and 1p34. As a result, one might wonder why Spinoza chose to use this axiom. One possibility is that he chose it arbitrarily. Another possibility is that he chose it because, as an axiom, it is more elegant. Yet another possibility is that he chose it because it helped him unify 2p5d, 2p6d and 2p7d, at least to some extent, because then they all rest on the causal axiom. Or perhaps it was a combination of these considerations.

Another notable fact about this reconstruction is that a lot of the 'heavy lifting' is done by 1a6, which isn't an axiom he cites. Granted, this is a drawback

⁴⁶ See 1p31d.

⁴⁷ See 2p1d, 1p30d and 2p4d.

⁴⁸ See 1d2.

of the second reconstruction. But, in the final calculation, it does not strike me as a significant drawback. Consider that 1a6 also does a lot of the heavy lifting in 2p4d and he doesn't cite it there either. Also consider that he doesn't cite many of the propositions and assumptions that are central to the first reconstruction, such as 1p16.

We are left with two reconstructions of 2p7d that seem roughly as plausible. Let's now turn to the other demonstration that might seem to create trouble for the causally restricted interpretation.

VI.2 Sense perception

Here is 2p16 and its demonstration:

The idea of any mode in which the human body is affected by external bodies must involve the nature of the human body and at the same time the nature of the external body.

For all the modes in which a body is affected follow from the nature of the affected body, and at the same time from the nature of the affecting body (by 2a1''). So the idea of them (by 1a4) will necessarily involve the nature of each body. And so the idea of each mode in which the human body is affected by an external body involves the nature of the human body and of the external body.

Spinoza subsequently argues that if an idea of our body involves the nature of an external body, and there is nothing in our mind that indicates that the external body no longer exists, then we thereby sense-perceive that external body.⁴⁹ In this way, 2p16 provides the foundation for his theory of sense perception.

There are two reconstructions, one which requires 1a4^{I+T} and one which requires only 1a4^I. Here's the first reconstruction:⁵⁰

- c₁ Suppose that an external body affects a human body to have mode *m*.
- c₂ Therefore, *m* follows from the nature of the human body and the nature of the external body. (e₁, 2a1'')
- c₃ Therefore, *m* was caused by the nature of the human body and the nature of the external body. (c₂)
- c₄ For every mode of extension, there is an idea of that mode. (2p3, 1p16)
- c₅ Therefore, there is an idea of *m*. (c₄)
- c₆ Cognition of an effect depends on, and involves, cognition of its cause. (1a4)

⁴⁹ See 2p16c1 and 2p17s.

⁵⁰ I've made a small adjustment. The demonstration begins with two claims about bodies in general, only later narrowing its focus to human bodies in particular. To simplify the reconstruction, I'm focusing just on human bodies.

- c₇ Therefore, the idea of *m* involves cognition of the nature of the human body. (c₃, c₅, c₆)
- c₈ Therefore, the idea of *m* involves cognition of the nature of the external body. (c₃, c₅, c₆)
- c₉ Therefore, if an external body affects a human body to have a mode, then the idea of that mode involves cognition of the nature of the human body and cognition of the nature of the external body. (c₁, c₇, c₈)

The relevant mode of the human body does not *inhere* in the external body. Therefore, that mode must be *transitively* caused by the nature of the external body. As a result, the validity of the inference to (c₆) depends on 1a₄^{I+T}.

One problem with this reconstruction is that it is unclear why 2p16 would entail its second corollary, that our ideas of external bodies indicate more about our own body than about the external bodies. There's nothing about (c₇) or (c₈) that suggests that one kind of cognition indicates more than the other. I'll return to this point later.

Let's now introduce the second reconstruction. It begins in the same way as the first reconstruction:

- d₁ Suppose that an external body affects a human body to have mode *m*.
- d₂ Therefore, *m* follows from the nature of the human body and the nature of the external body. (d₁, 2a1'')

Recall that within Spinoza's framework, if a mode of a body follows from the nature of the body, then the body is an *immanent cause* of that mode. For example, if a mode follows from the nature of God, then God is an immanent cause of that mode.⁵¹ Likewise, if a mode of a body follows from the nature of that body, then that body is an immanent cause of that modification. It might help to keep in mind that immanent causes can still be partial causes; just because the human body immanently causes some of its modes, it does not follow that those modes can't have external causes.

Consequently, within Spinoza's framework, (d₂) entails:

- d₃ Therefore, *m* is *immanently* caused by the nature of the human body. (d₂)

The next four steps are straightforward and correspond to steps in the first reconstruction:

- d₄ For every mode of extension, there is an idea of that mode. (2p3, 1p16)
- d₅ Therefore, there is an idea of *m*. (d₄)
- d₆ Cognition of an effect depends on, and involves, cognition of its immanent cause. (1a₄^I)

⁵¹ See 1p16 and 1p18.

d₇ Therefore, the idea of *m* involves cognition of the nature of the human body. (d₃, d₅, d₆)

Notice that the inference to (d₇) requires only 1a₄^I.

The next step depends on the plausible assumption that Spinoza thinks that at least some of a body's dispositions are part of its nature. There are several reasons why this is a plausible assumption. Spinoza says that the nature of a body is a certain *fixed* pattern of motion among its parts.⁵² At first, it might be tempting to think that this fixed pattern includes only occurrent motions between its parts. However, that interpretation is problematic. When I'm sleeping and when I'm running, there are very different motions between the parts of my body. For example, when I'm running my heart beats faster, my muscles frequently tense and my glands excrete sweat. But these changes can't correspond to changes in my nature, because if my nature changes, then I cease to exist.⁵³ It is tempting to infer that the nature of my body does not include details about heart rate, etc., in which case my nature might remain the same when I sleep and when I run. But if these kinds of details are excluded from my nature, then few things will follow from my nature, and Spinoza thinks that a lot of things follow from our natures, as is evident from 2p16. More plausibly, *dispositions* are included in the nature of the body, so that my body is disposed to have one pattern of motion and rest when I sleep and another pattern of motion and rest when I run, in which case there is no change in my nature when I transition from sleeping to running.

There is independent support for attributing this view to Spinoza. Spinoza claims that the nature of the body is its striving to preserve itself,⁵⁴ and part of the body's ability to preserve itself is its ability to respond appropriately in different circumstances. For instance, it pumps blood to the muscles when running, and it allows the muscles to relax when asleep. Thus, plausibly, the dispositions to behave in these ways are part of the body's nature.

Just to be clear: I'm not claiming that *all* of a body's dispositions are included in its nature. I'm also not claiming that *only* dispositions are included in a body's nature. My claim is merely that *some* dispositions are included.

It will be helpful to develop a slightly formal machinery for talking about these dispositions. Consider all the events that cause my eardrum to vibrate in a certain way. For example, a certain telephone and a certain alarm clock might both cause my eardrum to vibrate in that way. Spinoza seems to think that, because these events have a common effect, there must be something that distinguishes their natures from the natures of the events that do not have the same effect.⁵⁵ Let *F* pick out whatever distinguishes the natures of these things.

⁵² See 2p13l1 and 2p13def.

⁵³ See 2d2.

⁵⁴ See 3p7.

⁵⁵ See 2a1''.

For example, F might be the disposition to produce certain sound waves. In that case, my eardrum is disposed to vibrate in that way if and only if there is something F present. We might also express this disposition syllogistically: my eardrum vibrates in that way only and always when something that is F is present.

Note that F can be more or less specific. For example, if F is just the disposition to produce certain sound waves, then it isn't very specific, because lots of different objects might have that same disposition, including a telephone and an alarm clock. In contrast, if F is the disposition to reflect light in a certain way, such as the distinctive way that allows one to visually identify one's spouse, it will be far more specific, because far fewer objects have that disposition—perhaps only your spouse and his identical twin.

For simplicity, I'm setting aside a number of complications. For example, the presence of something that is F presumably causes that kind of vibration in my ear only in certain contexts; if someone is jackhammering nearby, then it is unlikely that an alarm clock will have the same effect on my eardrum—I am unlikely to hear it over the jackhammering. Accordingly, the dispositions are presumably context-relative. Nonetheless, for our purposes, we do not need to take these complications into consideration.

With this background in place, let's now return to (d₇). (d₇) establishes that the idea of m involves cognition of the nature of the human body. But the idea of m presumably doesn't involve *all* aspects of the body's nature. It presumably involves just those aspects of the human body's nature that are responsible for immanently causing m . In the case we're considering, it presumably includes just the disposition: my body is in mode m only and always when something that is F is present. Consequently, within Spinoza's system, (d₇) seems to yield:

d₈ Therefore, for some F , the idea of m involves cognition of the disposition: my body is in m only and always when something that is F is present. (d₇)

There are just a few more steps. But first, a point about translation: So far, we've been relying on the standard translation of '*involvit*', which is 'involves'. However, as noted before, '*involvit*' is a technical term from scholastic logic that we could also translate as 'implies'. Keeping in mind that scholastic logic was syllogistic, it follows that if an idea involves (*implies*) cognition that all and only A s are B s and involves (*implies*) cognition that x is an A , then it also involves (*implies*) cognition that x is a B . Likewise, if an idea involves (*implies*) cognition that something is A only and always when something else is B , and it involves (*implies*) cognition that something is A , then it also involves (*implies*) cognition that something else is B . More generally, if an idea involves cognition of some propositions that syllogistically imply an additional proposition, then that idea involves that additional proposition.

Note that I am not claiming that we can freely interchange ‘syllogistically implies’ and ‘involves’; I strongly suspect that an idea can involve something without syllogistically implying it. I claim merely that syllogistic implication is sufficient for involvement.

With this machinery in place, the last few steps of the argument are quick:

d₉ My idea of *m* involves cognition that my body is in *m*. (trivial)

d₁₀ Therefore, the idea of *m* involves cognition that something that is *F* is present. (d₈, d₉)

Keeping in mind that *F* is some aspect of the external body’s nature, Spinoza can conclude:

d₁₁ Therefore, if an external body affects a human body to have a mode, then the idea of that mode involves cognition of the nature of the human body and cognition of the nature of the external body. (d₁, d₇, d₁₀)

A disadvantage of this reconstruction is that there is no suggestion in the text that the idea of *m* involves the nature of the external body *because* the idea of *m* involves the nature of the human body. But I don’t think that this is a significant drawback. To begin, this doesn’t imply that Spinoza was making a *mistake*. Additionally, Spinoza omits at least one other key inference in 2p16d by taking it for granted that there is an idea of every mode, instead of referring back to 2p7.

An advantage of this reconstruction is that it becomes clearer why 2p16 establishes its second corollary. An idea of *m* indicates something very specific about our body, including that the body has modification *m* and is disposed to have modification *m* only in the presence of things that are *F*. But it indicates something much less specific about the external body: it indicates only that the nature of the external body is *F*. Consequently, it is easier to see why Spinoza would infer that ‘the ideas we have of external bodies indicate the condition of our own body *more than* the nature of the external body’ (2p16c2, emphasis added). In contrast, the first reconstruction does not seem to give us any insight into why the second corollary follows.

Building on this last point, note that *F* can be more or less specific and therefore can indicate more or less about external objects. For example, if *F* is just the disposition to produce certain sound waves, then our sense perception won’t indicate much, because lots of different objects might have that same disposition, including a telephone and an alarm clock. In contrast, if *F* is the disposition to reflect light in a certain way, such as the distinctive way that allows one to visually identify one’s spouse, one’s sense perception will indicate far more, because far fewer objects have that disposition.

Now that we have considered both demonstrations, let’s step back and reflect on the section as a whole. One might be persuaded that there are slight

advantages to the reconstructions that depend on $1a_4^{I+T}$. Nonetheless, as long as the reconstructions that depend only on $1a_4^I$ are roughly as plausible, these advantages won't be strong enough to counterbalance the four motivations for the causally restricted interpretation. Therefore, on balance, the motivation for the causally restricted interpretation is greater than the motivation for the unrestricted interpretation.

VII. CONCLUSION

What have we gained if the causally restricted interpretation is correct? To start, we've gained solutions to several longstanding puzzles, such as why Spinoza says that an idea can cease to be a passion and why he never says that our thoughts about everyday objects like Mount Washington are always thoughts about their ancient causes. We've also gained a better understanding of his arguments for the parallelism doctrine and his causal theory of sense perception, both of which are central to his system. Finally, we've undermined the widespread view that causation, conception and inherence are all coextensive, if not identical. In brief, we've gained a new perspective on many of the most fundamental issues in Spinoza's metaphysics and psychology.⁵⁶

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