4.1 Introduction

Kant’s engagement with Newton’s absolute space is complex and problematic. The received view goes that after endorsing relationism about space in *Physical Monadology*, Kant came to defend Newton’s absolute space in the 1768 text *Directions of Space*. But Kant’s flirting with Newton’s absolute space was short-lived, soon to be ended with the *Inaugural Dissertation* in 1770, where the ideality of space was first introduced, and fully defended in the *Critique of Pure Reason*. Yet, absolute space continues to appear in the *Metaphysical Foundations of Natural Science*, in the “Phenomenology” chapter, this time as an idea of reason (for an influential interpretation, please see Friedman [1992: Chapter 4; 2013: 474ff.]).

In this essay, I focus on one particular aspect of Kant’s departure from Newton’s absolute space: namely, the role played by seemingly Newtonian assumptions behind one of Kant’s mature arguments for the ideality of space, what I call the *argument from Spinozism*. The argument from Spinozism is not Kant’s main argument for the ideality of space. It does not even feature in the Metaphysical or Transcendental Exposition of the Transcendental Aesthetic of the first Critique, and can be found instead in the *Critique of Practical Reason*, among other places (primarily, Kant’s lectures on metaphysics). I have two main reasons for focusing on the argument from Spinozism.

First, this argument betrays, in my view, the real and profound reasons why Kant could not endorse Newton’s absolute space. I see the argument from Spinozism as expanding on and clarifying Kant’s criticism of the Newtonians to be found in the Transcendental Aesthetic. My first goal then is to
clarify the argument from Spinozism, elucidate its premises and structure, and highlight what I take to be its main – Newtonian in spirit – premises. I hope to show that Kant’s official line in the first Critique against the Newtonians – portrayed as the “mathematical investigators of nature” positing “two infinite, eternal and self-subsisting non-entities” – and, hence, his rationale for endorsing idealism about space, hides in fact more worrisome considerations.

I focus on the argument from Spinozism also for another reason. Despite the Newtonian-sounding premises of the argument, Kant introduced a further assumption about God’s omnipresence being the determining ground for motions (including human actions), and it is this assumption that carries the full weight of the Spinozistic charge. I argue that for the argument to go through, Kant had to introduce this further assumption, which is not to be found in Newton, but must instead be read into Newton’s view. Moreover, I show how Kant’s profound reasons for associating absolute space with Spinozism have to be found elsewhere; namely, not in the debate surrounding Newton’s own view and Newtonianism about space (although there certainly was such a lingering charge of Spinozism at the time). Instead, they have to be looked for in an influential metaphysical tradition that – from Malebranche, to Leibniz, and Baumgarten – addressed what I call the problem of the world as a totality of substances in interaction. In this essay, I argue that we should read and understand Kant’s defense of idealism about space in the argument from Spinozism against this intellectual backdrop.

In Section 4.2, I briefly review Kant’s famous criticism of Newtonians in the Transcendental Aesthetic, and Newton’s own view about space – famously presented in the General Scholium to the Principia and in the unpublished De Gravitatione. In Section 4.3, I unpack the troublesome relation between God and space in Kant’s argument from Spinozism (as expounded in the Critique of Practical Reason) by elucidating the premises and structure of the argument. Finally, in Section 4.4, I illustrate the intellectual backdrop against which, I urge, we should read the argument from Spinozism for the ideality of space. I show how Kant during the Critical turn engaged with the problem of the world, and, as a solution to it, came to reinterpret Newton’s absolute space as a phenomenon of the divine omnipresence. In so doing, my hope is to offer a new slant on understanding Kant’s ideality of space, as a response to both Newton’s metaphysics of space and to outstanding metaphysical problems about substances and their interaction (left open by Kant’s German and French predecessors).
4.2 Kant against the “Mathematical Investigators of Nature”

In the Transcendental Aesthetic, Metaphysical Exposition and Transcendental Exposition (A23/B38), Kant famously defends the apriority, necessity, and ideality of space. Space is said to be a “necessary representation, a priori, that is the ground of all outer intuitions.” More precisely, space is “the condition of the possibility of appearances, not as a determination dependent on them, as is an a priori representation that necessarily grounds outer appearances.” Hence, the “ideality of space in regard to things when they are considered in themselves through reason, i.e. without taking account of the constitution of our sensibility” (B44/A28).

Space cannot be a property or a determination of appearances, needless to say of things in themselves, otherwise it could not be intuited prior to the objects of which it is a determination, and its apriority would be jeopardized. But its apriority cannot be jeopardized since “the receptivity of the subject to be affected by objects necessarily precedes all intuitions of these objects”; hence, the form of all appearances must be given to the mind prior to all actual perception, and it must ground all outer intuitions. Authoritative readings of the Transcendental Aesthetic have focused on both the receptivity thesis and the related thesis of the unknowability of things in themselves behind Kant’s defense of idealism about space.¹

In what follows, I concentrate on a different – and strangely overlooked – argument for the ideality of space, what I call the argument from Spinozism (to be found in the second Critique). In so doing, I hope to show another route to Kant’s idealism about space, a route that goes through Kant’s departure from and mature reinterpretation of Newton’s absolute space. In the Transcendental Aesthetic, the Newtonians (described as “the mathematical investigators of nature”) are praised for succeeding in making mathematical knowledge of nature possible by “opening the field of appearances for mathematical assertions” (A40/B57). Yet, they make the mistake of assuming “two eternal and infinite self-subsisting non-entities (space and time), which exist (yet without there being anything real) only in order to comprehend everything real within themselves” (A39/B56).

¹ Strawson (1966) argued that subjects like us can, pace Kant, produce spatiotemporal representations by being affected by things in themselves (where affection incoherently presupposes that objects are located already in space and time). Allison (1983) has reinterpreted appearances as spatiotemporal entities (phenomena), i.e., things insofar as they are viewed as subject to the conditions of human sensibility, whereas things in themselves are nonspatiotemporal entities not subject to the conditions of human sensibility. And Langton (1998) has interpreted the receptivity thesis as implying that our knowledge is confined to spatiotemporal phenomena, understood as relational properties of substances whose intrinsic properties (qua things in themselves) remain unknown.
metaphysicians of nature [i.e., the Leibnizians–Wolffians], on the other hand, are accused of identifying space and time with relations of appearances abstracted from experience, at the cost of disputing “the apodeictic certainty of a priori mathematical doctrines in regard to real things (e.g., in space)” (ibid.). The metaphysicians of nature seem to fare, overall, worse than the mathematical investigators of nature; for the latter are at least in a position to secure the apodeictic certainty of mathematical knowledge, while the former cannot “bring the propositions of experience into necessary accord with those assertions.” While acknowledging the ability of the Newtonian conception of space to secure mathematical and geometrical knowledge, Kant distances himself from its metaphysical underpinning. In particular, Kant’s main qualm against the mathematical investigators is about positing two “eternal and infinite self-subsisting non-entities.” The *locus classicus* is, of course, Newton’s General Scholium to the *Principia*, where the Lord God Pantokrator is introduced as an “eternal, infinite, and absolutely perfect being” (Newton 1999: 940), who with His omnipresence and eternity constitutes absolute space and absolute time:

He is eternal and infinite, omnipotent and omniscient, that is, he endures from eternity to eternity, and he is present from infinity to infinity; he rules all things, and he knows all things that happen or can happen. He is not eternity and infinity, but eternal and infinite; he is not duration and space, but he endures and is present. He endures always and is present everywhere, and by existing always and everywhere he constitutes duration and space. (…) He is omnipresent not only virtually but also substantially; for action requires substance (…). In him all things are contained and move, but he does not act on them nor they on him. (Newton 1999: 940, emphasis added)

Even more clearly in the unpublished *De Gravitatione* (probably written a couple of years before the *Principia*, in 1685), Newton defined space as “an affection of a being just as a being. No being exists or can exist which is not related to space in some way. God is everywhere, created minds are somewhere, and body is in the space that it occupies; and whatever is neither everywhere nor anywhere does not exist. And hence it follows that space is an emanative effect of the first existing being, for if any being whatsoever is posited, space is posited. (…) So the quantity of the existence of God is eternal in relation to duration and infinite in relation to the space in which he is present” (Newton 2004: 25, emphasis added). By declaring space to be an “emanative effect of the first existing being,” and by making God constitute space and time “by existing always and everywhere,” Newton equated the omnipresence of God with absolute space in whom “we live, move, and have our being,” to echo St Paul (Acts 17:28).
To be clear, by defining space as “an emanative effect” of God, Newton was at pains to clarify that space is neither a substance nor an accident. It is not a substance, since “it is not among the proper affections that denote substance, namely actions, such as thoughts in the mind and motions in body. For although philosophers do not define substance as an entity that can act upon things, yet everyone tacitly understands this of substances, as follows from the fact that they would readily allow extension to be substance in the manner of body if only it were capable of motion and of sharing in the actions of body” (Newton 2004: 21, emphasis added). Thus, absolute space is not a substance as it is not capable of acting upon things, i.e., it is not capable of motion in and of itself, by contrast with bodily substances. Nor is it an accident inhering in the subject either “since we can clearly conceive extension existing without any subject, as when we imagine spaces outside the world or places empty of any body, whatsoever, and we believe [extension] to exist wherever we imagine there are no bodies” (Newton 2004: 22).

We can then understand Kant’s qualm regarding the mathematical investigators of nature assuming “two eternal and infinite self-subsisting non-entities”: space (and time) are non-entities, because they are not substances capable of actions in and of themselves; yet they are not accidents either, because they are self-subsisting, infinite, and eternal to contain everything else that exists and moves.

The relation between God and Newton’s absolute space has been at the center of an important literature among Newton’s scholars, which I cannot enter into here (see Janiak and Schliesser [2012] for the latest additions to this debate). It suffices to say that to the eyes of many of his generation, Newton’s view appeared dangerously close to a form of Spinozism, as Eric Schliesser (2013) has recently documented by focusing on the correspondence between Newton and Bentley and the changes to the second edition of Newton’s *Principia*. Absolute space as a receptacle of God led to the perilous association with Spinoza’s God, encompassing with His substance everything that exists. What matters for my purposes here is that the charge of Spinozism against Newton was (rightly or wrongly) present in the cultural milieu in which Kant worked, and Kant seems to have been familiar with it, as we find him raising this charge almost verbatim against Newton in a famous argument for the ideality of space, to which I now turn.

4.3 The Ideality of Space and Kant’s Argument from Spinozism
Kant seems to have had more worrisome reasons against the mathematical investigators of nature than those expounded in the Transcendental
Kant on the Ideality of Space and the Argument from Spinozism

Aesthetic. These reasons can be found in a passage from the *Critique of Practical Reason* in which Kant discusses the relation between freedom and natural necessity, where the latter concerns the existence of things only insofar as they are determinable in time qua appearances, while the former concerns their causality as things in themselves. The distinction between freedom (key for moral laws) and natural necessity (which underlies what Kant calls the mechanism of nature in accordance with the natural law of causality) leads Kant to a general reflection about human actions as being both free with respect to moral laws, and mechanically conditioned with respect to the law of causality. It is in this context that we find what I call the argument from Spinozism:

as soon as one admits that God as universal original being is the cause also of the existence of substance (a proposition that can never be given up without also giving up the concept of God as the being of all beings and with it his all-sufficiency, on which everything in theology depends), one must admit that a human being’s actions have their determining ground in something altogether beyond his control, namely in the causality of a supreme being which is distinct from him and upon which his own existence and the entire determination of his causality absolutely depend. In fact, if a human being’s actions insofar as they belong to his determinations in time were not merely determinations of him as appearance but as a thing in itself, freedom could not be saved. A human being would be a marionette or an automaton, like Vaucanson’s, built and wound up by the supreme artist (...). Therefore I do not see how those who insist on regarding time and space as determinations belonging to the existence of things in themselves would avoid fatalism of actions (...). On the other hand, it is quite easy for us to distinguish between the determination of the divine existence as independent of all temporal conditions and that of a being of the sensible world, the distinction being that between the existence of a being in itself and that of a thing in appearance. Hence, if this ideality of time and space is not adopted, nothing remains but Spinozism, in which space and time are essential determinations of the original being itself, while the things dependent upon it (ourselves, therefore, included) are not substances but merely accidents inhering in it. (...). Of such great importance is the separation of time (as well as space) from the existence of things in themselves that was accomplished in the *Critique* of pure speculative reason. (CPrR 5:100–103)

Kant’s argument from Spinozism surprisingly chimes with some of Newton’s aforementioned remarks. If God is the cause of the existence of substance, and if we regard ourselves as substances (or things in themselves),

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2 This passage has been analyzed by Brewer and Watkins (2012) with a particular focus on the threat of theological determinism, and its relation to both Leibniz and Spinoza. In what follows, I concentrate on this passage from the perspective of Kant’s defense of ideality about space.
then it turns out that God is also the cause, or the determining ground of our human actions. But if so, freedom would be jeopardized and fatalism of action would follow. This undesirable conclusion can be avoided via a two-step maneuver:

(i) By drawing a distinction between the divine existence as the existence of a being in itself and our existence as things in appearance; and
(ii) By reallocating space and time from “essential determinations of the original being itself,” to us and our outer sense.

Note that step (i) per se is not sufficient to rule out fatalism of action. Step (ii) is also crucially needed. Indeed, it is possible to conceive that even under the assumption of a distinction already in place between God as a thing in itself and us as things in appearance, if (ii) was not in place (i.e., if space remained an “essential determination of the original being itself,” as with Newton’s absolute space for example), any alteration of place that we may perform with our actions would still have its determining ground in something altogether beyond our control, i.e., it would take place in absolute space (as a determination of God), and hence would be dependent upon God’s own substance. Hence, Kant’s conclusion that the ideality of space and time is the best antidote against the Spinozistic danger lurking in the view that takes space (and time) as “essential determinations of God.” Interestingly, no explicit mention is here made of Newton’s absolute space (and in the longer passage which I have omitted in the quote above, reference is also made to Mendelssohn’s view, which I will not discuss here). But the overall discussion leaves little doubt that it is to a broadly Newtonian view that Kant is referring in relation to space (and time) as “essential determinations of the original being itself.” Only by distinguishing between appearances and things in themselves and by reallocating space (and time) to determinations of things as appearances, rather than essential determinations of the original being itself (God), can the charge of Spinozism be averted.

Three comments are in order. First, this passage shows how the ideality of space (and time, which I will not discuss here) is not just a consequence of the unknowability of things in themselves. The argument from

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3 It is worth noting here again that what Kant reports as fatalism of action following from God qua the ultimate ground of alteration of space (if understood as Newton’s absolute space) seems to be a report on what he took to be probably general concerns in the cultural milieu of the time about Newton’s view (with its perceived Spinozistic flavor). For Kant’s own considerate view on fatalism would require more than the assumption that our actions are grounded on God qua absolute space: instead, our own free will and choice (prior to outer action) would also have to be constrained or determined. Obviously, the problem of free will and moral choice does not feature in Newton’s view of space. I thank Karl Ameriks for drawing my attention to this point.
the unknowability of things in themselves needs be supplemented. We must reallocate space from an essential determination of God to us and our outer sense, because the mere distinction between appearances and things in themselves by itself cannot eschew the danger of fatalism of action. If space remained an essential determination of God (as with Newton’s absolute space), freedom would be jeopardized.

Second, some of the premises in Kant’s argument from Spinozism have a Newtonian-sounding origin. Kant seems to be reacting against the Newtonian view well-captured by the expression that “space is an affection of a being just as a being.” If space is a determination of substances in general, then it follows that space is also, first and foremost, an emanative effect of the first existing being; or, as Kant puts it, an “essential determination of the original being itself” (God).

Third, Newton’s view that space is an affection of a being just as a being; and that space is, first and foremost, an emanative effect of the first existing being – jointly – do not license any Spinozistic-flavored conclusion that everything that moves in space (including ourselves) is an accident inhering in God’s substance. For Kant’s argument from Spinozism to follow from Newton’s view of space, a further premise is required. Namely, that God’s omnipresence qua absolute space grounds, in the sense of being the determining ground for motions of bodies (including our own bodily actions).

But it is far from clear that this further premise can be found in Newton; or is in fact compatible at all with a Newtonian view about space. On the contrary, the fact that we can conceive of absolute space as bereft of matter and independently of bodies, clearly suggests that for Newton, absolute space is not the determining ground for motions, in the strong sense required for Kant’s argument from Spinozism to go through. Moreover, Newton’s aforementioned comment in De Gravitatione about space not being a substance (because not being capable of acting upon things) reveals once more Newton’s considered view on the matter. Thus, for Kant’s argument from Spinozism to go through, Kant needed to surreptitiously assume that God’s omnipresence (qua absolute space) grounded alterations of place. Kant’s overall argument from Spinozism can then be summarized as follows:

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4 For the ambiguities surrounding the term “determining ground” in Kant’s moral philosophy, see Ameriks (2012).
(1) Suppose that space is an essential determination or property of substances.
(2) *A fortiori*, space must be an essential determination of God, qua substance.
(3) But God is not just a substance among substances. God is the *cause* of the existence of substance.
(4) Thus, the spatial determination of God as omnipresence (e.g., Newton’s absolute space) is the ultimate *determining ground* for any alteration of place.
(5) But then the spatial determination of God as omnipresence (e.g., Newton’s absolute space) is also the *determining ground* for human actions (after all, in God, ‘we live, move and are’).
(6) The spatial determination of God as omnipresence blurs the distinction between causality according to natural laws and causality according to moral laws, i.e., between natural necessity and freedom.
(7) Fatalism of action, or Spinozism, follows.
(8) To avoid Spinozism, we must deny premise (2), i.e., that space is an essential determination of God, and embrace idealism about space instead. QED.

Prima facie, Kant’s argument is puzzling in more than one way. Denying premise (3) in the argument above is not possible because, as Kant himself concedes, denying that God is the *cause of the existence of substance* would be tantamount to denying “the concept of God (…)”, on which everything in theology depends.” But accepting premise (3) seems, on the other hand, to land us on a slippery slope, where the causality of the supreme being becomes the *determining ground* for the causality we encounter in nature (including in our own human actions). Natural necessity according to laws of nature would reduce to a mere accident inhering in God’s own causality; and freedom, according to the moral law, would be jeopardized. These undesirable conclusions can only be averted – Kant claims – if we assume that our human actions (and any sequence of events in nature) unfold into space and time, not *qua* essential determinations of the original being (i.e., Newton’s absolute space and time) but *qua* forms of our sensibility. Thus, Kant’s defense of idealism about space in the argument from Spinozism is centrally tied to the causal role that God plays in the world, and space understood as an “essential determination of the original being.” While the Newtonian tradition had influentially portrayed God’s role in the natural world as mediated by absolute space – as the receptacle (*organon*) of God’s omnipresence in nature – Kant seems to warn us that going down this path would lead us to dangerous fatalism of action.
In the next section, I argue that it is unsurprising that some of the key premises in Kant’s argument cannot in fact be found in Newton. For the argument from Spinozism, despite the Newtonian-sounding premises, should be read and understood against the backdrop of a different metaphysical tradition that engaged with the problem of the world as a totality of substances in interaction (<commercie>). If my analysis is correct, Kant’s argument from Spinozism hides more profound metaphysical reasons for endorsing idealism about space, reasons that have less to do with Newton’s own view, and more to do with the influential views of Malebranche, Leibniz, and Baumgarten.

4.4 Kant on God, Space, and the World as a Real Connection of Substances

If my interpretive take in the previous section is correct, we have identified in some of the premises of Kant’s argument the culprit for his charge of Spinozism leveled against a broadly Newtonian view of space. Premise (4) in particular (i.e., that the spatial determination of God as omnipresence is the determining ground for any alteration of place) seems to bear the burden of the proof. Such premise, I have already noted, cannot be found in Newton. How can absolute space be a determining ground for any alteration of place, including our own bodily actions? And why should absolute space qua determining ground for alterations of place follow from premise (3), i.e., that God is the cause of the existence of substance? That God is the cause of the existence of substance is a noncontroversial claim with a long history in natural theology. So Kant’s argument from Spinozism cries out for an explanation of how premise (4) can legitimately follow from premise (3). In this section, I take some steps toward answering this question.

First, I argue that the rationale for the troublesome step from premise (3) to premise (4) in the argument from Spinozism should be looked for in the metaphysical tradition that goes from Malebranche to Leibniz, from Crusius to Baumgarten. This metaphysical tradition provided the backdrop for Kant’s analysis of God as the cause of the world intended as a connection (<nexus>) of substances in interaction (<in commercio>). The puzzling step in the argument from God as the cause of the existence of substance to God as the determining ground of human actions can, in my view, be illuminated if we consider the way Kant understood the world as a totality of substances, and the way he provided his own answer to open problems.

For a similar analysis of how Baumgarten’s treatment of Spinozistic fate and chance influenced Kant (both in the lectures on metaphysics and in the first Critique), see Watkins (2000).
left by his predecessors about the relation between God and the world, so understood.

Second, as a result of Kant’s own solution to these problems (in terms of real connection <nexus realis> among substances, I argue), Kant came to reinterpret absolute space in idealistic terms (whereby absolute space becomes as early as the 1770s the “phenomenon of the divine omnipresence,” *Metaphysik L*, 28:214, *LM* 36). Hence, I conclude that Kant’s real motivation for the ideality of space – in the argument from Spinozism – should not be sought in Kant’s engagement with a broadly Newtonian view, after all. His real motivation is instead downstream to a wider metaphysical view about God, space, and the world that Kant came to elaborate in the 1770s, in response to both occasionalism and Leibnizian pre-established harmony.

If my analysis proves correct, the threat of Spinozism is a red-herring. Or better, it is a much later spin that Kant gave to his own idealistic solution to the metaphysical problem about God and the world, and not the real start-up problem for idealism about space. Although arguments against Spinozism can be found in Baumgarten’s *Metaphysics*, and again in Kant’s lectures on metaphysics, a closer reading reveals that idealism about space as the best antidote against Spinozism is a gloss (even a gimmick, one may say) that Kant gave to fully worked-out and independently motivated arguments for the ideality of space. Or so, I shall argue. Central to Kant’s defense of idealism is instead a reinterpretation of space as a *phenomenon of God’s omnipresence in the world*, a so-called determining ground for the interaction (<commercium>) among substances.

### 4.5 Kant at the Critical Turn (Mid 1770s to 1783) on God and the World: Interaction among Substances, Real Influence, and Space as a Phenomenon of God’s Omnipresence

Alexander Baumgarten’s *Metaphysics* was one of the most influential texts of the time, a text that Kant repeatedly used for his lectures on Metaphysics. In Part II, Cosmology, Section II “The negative concept of the world,” Baumgarten distinguished between *fate* (more precisely, Spinozistic fate) and *chance*. The former is the absolute necessity of events in the world; the latter is the unknowability of sufficient grounds for events that occur in the world (Baumgarten 2013 [1739/1757]: 171, §382–83). This distinction proves functional to Baumgarten’s discussion about the relation between world and God, whereby the world is said to be “neither an
infinite substance nor an internal determination of an infinite substance, and hence the world is not the essence, attribute, mode or modification of an infinite being. Hence every world is to be posited apart from the infinite substance, so this world also exists apart from the infinite being, which for this reason is called an EXTRAMUNDANE BEING, a being that is actual apart from this world” (Baumgarten 2013 [1739/1757]: 172, §388). And while “THEOLOGICAL SPINOZISM is the doctrine denying that God is an extramundane being and it is an error” (ibid., 291, §855), Baumgarten hinted also at the association between theological Spinozism and Newtonian absolute space by declaring that “in God there are no simultaneous things posited mutually outside one another, no parts, hence no space. Therefore, God is neither extended, nor does he fill up space in the sense that extended things are said to fill it up” (ibid., 288, § 841).

 Baumgarten’s influential characterization of God as an extramundane being posed, however, a pressing metaphysical problem, which the young Kant grappled with. What is the relation between God qua extramundane being, and the world? How could God as a first cause that does not however inhabit the world (extramundane being) be present in the world itself? The obvious advantage of the Newtonian system was to avoid this metaphysical question altogether, by offering absolute space and time as the receptacle (organon) of God, in which everything that exists, moves and is (unappealing as it was to think of God as ‘filling up’ space). In the German tradition that goes from Leibniz, to Crusius and Baumgarten, the problem remained wide open (for more details, please see Watkins 2006) and was the subject of lively debates that influenced the pre-Critical Kant.

 In New Elucidation (1755), Kant tackled this problem in a novel way. For he offered an alternative to the Newtonian system, whereby it was the action and reaction of substances on one other, their ability to act upon other substances that was said to constitute space. Kant went as far as identifying the connection of substances, by virtue of which they were said to determine space, with Newton’s gravitational attraction.⁶ A year later in Physical Monadology (1756) Kant clarified how space “is entirely free from substantiality and ( . . .) is the appearance of the external relations of unitary

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⁶ “If the external appearance of this universal action and reaction throughout the whole realm of space in which bodies stand in relation to one another consists in their reciprocally drawing closer together, it is called attraction. Since it is brought about by co-presence alone, it reaches to all distances whatever, and is Newtonian attraction or universal gravity. It is accordingly probable that this attraction is brought about by the same connection of substances, by virtue of which they determine space. It is also probable that it is the most fundamental law of nature governing matter, remaining constantly in force only in virtue of God’s immediately sustaining it, according to the opinion itself of those who declare themselves to be followers of Newton” (NE 1:415).
monads” (PM 1:479; for an analysis, see Massimi, 2017). Kant modeled the action and reaction among substances—a vexed issue in the German metaphysical tradition—on the natural sciences: i.e., by thinking of substances as physical monads acting and reacting on one another in virtue of fundamental forces of attraction and repulsion. This model allowed the young Kant to think of space as the appearance of external relations among physical monads (pace Newton) and to think about the world as a totality of substances in interaction via fundamental forces acting as efficient causes or determining grounds for a plurality of effects (e.g., attraction causes changes of motion; repulsion causes clouds, the maintenance of fire, among many others). As early as 1755–56, Kant framed the problem of the world (i.e., the problem of explaining the world as interaction among substances) on the model of the natural sciences, whereby substances were understood as physical monads and dynamical forces (as determining grounds) were said to necessarily cause effects in nature.

What about God? In The Only Possible Argument (1763) ‘Second Reflection: Differentiation of the dependency of all things upon God into moral and non-moral dependency,’ Kant gave a splendid distinction between moral and nonmoral dependency of things upon God, whereby moral dependency is dependency through the will of God, while nonmoral dependency is dependency without the will of God. Thus, Kant claimed, when we say that God is the ground of the existence of things, this dependency is always moral: ‘in other words, things exist because God willed that they should exist.’ But when we say that God is the ultimate ground of the internal possibility of things, we do not mean this as a moral dependency: the internal possibility of things (with all fruitful and serendipitous consequences we observe in nature) does not depend on the will of God. These remarks already point in the direction of a helpful distinction between God as the cause of the existence of substances (through His will) vs. God as determining ground for the mechanism of nature (which Kant seems to reject as early as 1755–63). Yet in 1763 Kant had not yet worked out the exact relation between God (as the ultimate ground or cause of the world), and the world itself (as a totality of substances in interaction and following an order according to natural laws, and determining ground-effects causal relations). If God is an ens extramundanus (as Baumgarten claimed against theological Spinozism) and not part of any causal chain in nature (despite being the first cause of everything that exists), how can He also be present in the world? If Newton’s absolute space was not a live option for Kant to think about God and the world, what else could be?
In what follows, I show how in the mid 1770s Kant came to rethink Newton’s absolute space along idealistic lines (i.e., as a *phenomenon* of the divine omnipresence) precisely in the attempt to answer the problem of the world (i.e., the problem of understanding the relation between God and the world as a totality of substances). Some of the most interesting passages on this issue can be found in *Metaphysik L.*, containing students’ notes from Kant’s lectures on Metaphysics in the mid 1770s (which featured Baumgarten’s *Metaphysics* as textbook). Latching onto Baumgarten’s discussion about the world as a totality of substances and God as *ens extra-mundanus*, Kant (*Metaphysik L.*, 28:212–13, *LM* 34) marked an important distinction between the mutual interaction *<commercium>* among substances and God as an absolutely necessary being, who cannot stand in interaction with substances because He subsists in and of Himself, without any need for interacting with other substances. Thus, necessary beings are *isolated* and cannot be in space, Kant now claims, because “to exist in space already means: to be in community; for space is a *phenomenon of the general connection of the world* and we want to have precisely the ground of this connection through space” (*Metaphysik L.*, 28:213, *LM* 34, emphasis added). Once again, pace Newton, God cannot *exist in space* because existing in space means already being in community with other substances, and God is not a substance among substances. Nor is the interaction among substances themselves (qua *necessary* beings) possible through space either (again pace Newton) because, as we just noted, Kant claimed that the very notion of necessary being implies that they are isolated and not in interaction. Thus, how can substances (qua necessary beings) be, after all, in interaction for the world (as a totality of substances) to be possible? And how can God act as the ultimate ground for the world, while also not entering into any interaction with it? Here is Kant’s solution to this conundrum:

Interaction (*<commercium>* ) is thus possible not through space, but rather only through this, that they all are through One and depend on One; for otherwise those that depend on another would not stand in interaction *<in commercio>* with each other. Every world thus presupposes a primordial being, for no interaction *<commercium>* is possible except insofar they are all there through One. *As phenomenon*, space is the infinite connection of substances with each other. Through the understanding, we comprehend only their connection, to the extent they all lie in the divine. (…) If we imagine this connection *sensibly*, then it happens through space. Thus, space is the highest condition of the possibility of the connection. Now if we sensibly represent the connection of substances, which consists in this, that God
is present to all things, then we can say: *space is the phenomenon of the divine [omnipresence]*. (Metaphysik L4 28:214, LM 35–36)

Kant’s departure from Newton is complete; and it acquires new light if read against the backdrop of Kant’s engagement with the metaphysical problem of the world he inherited from Baumgarten. Substances qua necessary beings cannot be connected through space, for space presupposes community and mutual interaction and it is against the very concept of a necessary being to be in community. Thus, substances can only be connected through God as the One ultimate ground. While we can think of the connection among substances through God in our understanding, we can also represent such a connection *sensibly* via space. Thus, while not doing any genuine metaphysical work of connecting substances (for the reasons just explained), space is nonetheless the way in which we come to represent to our senses the presence of God in all things. Far from being the determining ground for the connection of substances, space (or better, what used to be Newton’s absolute space) is now *the phenomenon of the divine omnipresence*. Space is not God’s receptacle, through which we live, move, and are. Instead, space is the “highest condition of the possibility of the connection.” Space makes possible for us to represent things as being connected (and hence makes possible for us to know the world as a totality). But space is not itself the determining ground for such a connection.

What is most interesting in this story are some corollary discussions about how to think of substances as being connected through God (but not through space). Along lines already to be found in *New Elucidation*, Kant argues that sheer co-presence or co-existence of substances (<commercium originarium>) does not constitute per se interaction, pace Crusius’s physical influx. Instead, Kant continued, the *commercium* among substances that constitutes the world requires a ‘third ground,’ and is then called derivative interaction (<commercium derivativum>).

Derivative interaction comes in two varieties: via *physical influence* (but not in the “crude sense” of physical influx, Kant hastened to add), or via *hyperphysical influence*. Both are derivative influences according to laws of nature, but the difference is that hyperphysical influence refers to laws of nature that are “posited by another being” (28:213, LM 35). Or, more precisely, it is influence “according to the universal determinations of the extra-mundane being” (28:214, LM 36). And to illustrate hyperphysical influence, Kant gives an example of fatalism of action, as when “a third being moves my foot when I want to move it.” This can happen in two different ways.
Hyperphysical influence can be automatic (<harmonia automatica>) when “for every single case the highest cause has to arrange an agreement; thus where the agreement rests not on universal laws, but rather on a primordial arrangement which God put in the machine of the world” (28:215, LM 36). Kant identifies automatic harmony with Leibniz’s pre-established harmony as a harmony that is not generated through natural laws according to determining grounds–effects; but is instead instituted by God Himself via an original intervention in the machine of the world. Calling pre-established harmony “automatic harmony” is revealing, I think. The risk of reducing human actions to automata (as Kant will say a decade later in the argument from Spinozism) seems to be associated not so much with Spinoza in this passage of Metaphysik L, but rather with the kind of derivative hyperphysical influence advocated by Leibniz.

The second kind of hyperphysical influence is occasionalistic whenever “the ground is not arranged at the beginning such that at every occasion God accomplished the effect continuously with the continuation of the world” as in Malebranche and Descartes. Kant complains that both kinds of hyperphysical influence provide only an ideal connection (<nexum>) or interaction (<commercium>), but not a genuine or real interaction among substances, because they posit the ground of the interaction among substances in a primordial being that acts to make possible such interaction (via either pre-established harmony or occasionalism). What is required for the concept of the world as a totality (<totum>), Kant continues, is that substances be in real connection (<in nexu reali>). This real connection has to be derivative and physical (but not in Crusius’s crude sense), while also being grounded ultimately “on the unity of the primordial being” (28:215, LM 37). These metaphysical reflections end here in Metaphysik L, without going much further in terms of explicating how to reconcile the primordial being qua ultimate ground of the unity of nature with real connection (<nexus realis>) understood as a physical and derivative influence among substances.

This dichotomy finds its final resolution in the Critical period, as becomes evident in corresponding passages of Metaphysik Mrongovius, dating to 1782–83. A year after the first Critique, Kant went back to the notions of <nexus idealis> vs. <nexus realis>. Once again, he stressed how ideal connection is not real connection among substances or better what he now calls “things in themselves, but rather merely in the idea of the observer who considers them” (Metaphysik Mrongovius 29:866, LM 236), with the consequence that there is “no world but rather only an ideal whole in thoughts.” And again in this context, Kant mentions Descartes’s occasionalism and
Leibniz’s pre-established harmony as two examples of \textit{nexus idealis}, the
danger of which is this: “For God could also have allowed representations
of body to come about in the soul, either as occasioned \textit{occasionaliter} or
as pre-established \textit{praestabiliter}, without actual bodies being necessary.
These representations could indeed always harmonise with the soul. (…) For since the souls effect nothing, without them God could still effect all
alterations in bodies” (29:867, \textit{LM} 237). The risk of reducing freedom of
action to automata reappears in the same context of a criticism of Leibniz
and Descartes’s system. As an alternative, and in defense of \textit{nexus realis},
Kant now gives his own mature solution: real connection is only possible
in the noumenal world “if one assumes a common cause, i.e. God, which
has already put that \textit{real influence} in the nature of substance”; while in
the phenomenal world, it is possible from the mere existence of substance
in space:

The concept of space accomplishes in the sensible world \textit{mundo sensibili}
what the divine omnipresence does in the noumenal world \textit{mundo
noumenon}, and one can therefore call it as it were a phenomenon of the
divine omnipresence. Perhaps God wanted thereby to make his omnipres-
ence sensibly cognizable to us. Newton called it the seat of the senses
\textit{sensorium} of the divine omnipresence. Perhaps space is also the only
sensibility that belongs to all rational beings other than God. (Metaphysik
Mrongovius 29:866, \textit{LM} 236)

Kant’s final solution to the metaphysical problem of the world as a totality
of substances can be found in Kant’s mature distinction between noumenal
world and phenomenal world. Real connection among substances belongs
to the former, by positing God as the common cause of the world. In the
phenomenal world, Kant concludes, we no longer need to prove any real
connection among substances “for it is nothing in itself. Here [in the phe-
nomenal world] everything is interaction \textit{commercio} in virtue of space”
(29: 868). The last vestige of Newton’s absolute space can be found in the
phenomenal world where the “concept of space accomplishes what divine
omnipresence does in the noumenal world.” Space does not ground any
real connection among substances because it is only a \textit{phenomenon}, it is a
form of our sensibility though which we can sensibly represent the world as
a totality. The unity and totality of the world can only be grounded in God
qua the first cause in the noumenal world. Space, as a mere \textit{phenomenon},
allows us to intuit the world as interaction \textit{commercium}.

Kant’s idealistic turn is complete. God is not extended in space, He
does not fill up space; nor does space – as a determination of God’s
omnipresence – ground any real connection among substances or our bodily actions. By distinguishing between noumenal world and phenomenal world and by relegating space to the latter and real connection among substances to the former, Kant could explain what escaped his predecessors. Namely, why the world forms a composite real of substances and how God, qua *ens extramundanus*, can ground the world (and be omnipresent in it) without yet entering into any real interaction <*commercium* > with it. Kant’s idealism about space could at once solve the metaphysical problem that beset Baumgarten, Leibniz, Malebranche and Descartes, and do justice to God’s omnipresence in the world without the pitfalls of Newton’s absolute space (i.e., thinking of God as spatially extended). Fatalism of action results only if we conflate these two realms and take God as a ground for hyperphysical influence (as occasionalism and pre-established harmony did). Freedom is jeopardized only when we take appearances for things in themselves, i.e., if we take God’s omnipresence in space not as a *phenomenon* but as a *thing in itself* (as with Newton’s absolute space).

What about Spinoza? After all, the argument that has concerned us in this essay is named after him. Interestingly, Spinozism does not enter into Kant’s metaphysical reflections about space until much later. After the reference to Spinozism that we found in the second *Critique*, Kant returns to the threat of Spinozism almost *verbatim* in *Metaphysik L₂* (1790–91), where space and time are said to be “not things themselves, not properties, not a constitution of things, but rather the form of sensibility. (…) If I assume space to be a being in itself, then Spinozism is irrefutable, i.e. the parts of the world are the parts of the divinity. Space is the divinity; it is united, all-present; nothing can be thought outside of it; everything is in it. (…) Space occurs only with things, as appearances.Appearances teach us nothing as to how the things are, but rather how they affect our senses” (*Metaphysik L₂* 28:567, *LM* 331). Even more interestingly, in *Metaphysik Vigilantius* (K₃, 1794–95), Kant makes explicit the link between the threat of Spinozism and his earlier reflections about space as a phenomenon of the divine omnipresence. Once again, he comes back to Newton’s incorrect idea of space as the instrument <*organon*> of the divine omnipresence and the whole discussion is cast once more in terms of substances in the world having a reciprocal influence on each other and standing in real connection <*in nexu reali* > via God as a communal cause (*Metaphysik Vigilantius* (K₃,29:1007, *LM* 476). Kant rehearses the by now familiar arguments against both Crusius’s physical influence as <*commercium originarius*> of substances (which cannot be in interaction in virtue of
their simple existence) and also against Leibniz’s pre-established harmony as a derivative hyperphysical influence which can only deliver the world as an ideal whole <totum ideale>. The distinction between phenomenal and noumenal world features once again, with the phenomenal world providing space as that “which connects the substances, through which they are in interaction <in commercio>,” while the interaction of substances in the noumenal world <commercium in mundo noumeno> requires God as a common cause:

If I assume all substances as absolutely necessary, then they cannot stand in the slightest community. But if I assume the substances as existing in community, then I assume they all exist through a causality, for only through that can their community be explained. – Space itself is the form of the divine omnipresence, i.e. the omnipresence of God is expressed in the form of a phenomenon, and through this omnipresence of God all substances are in harmony. But here our reason can comprehend nothing more. –

Those who assume space as a matter in itself or as a constitution of things in themselves, are required to be Spinozists, i.e. they assume the world to be a summation of the determinations of a united necessary substance, thus only one substance. Space as something necessary would then also be a property of God, and all things exist in space, thus in God. (Metaphysik Vigilantius K3 29:1009, LM 478)

The charge of Spinozism could not be clearer. But, as I hope to have shown in this chapter, the motivation and profound reasons for such a charge should not be looked for in Newton’s own view, or the lingering charge of Spinozism against Newton’s view at the time. Rather, they should be looked for in the way Kant engaged and offered a solution to a long-standing metaphysical problem about the world, as a whole of substances in real connection. Kant’s mature solution relied on the distinction between phenomenal world and noumenal world, whereby space was relegated to the former qua phenomenon, and God as a first cause to the latter qua noumenon. The charge of Spinozism – I claimed – is a later spin Kant gave to his argument for the ideality of space. Those, who blur the distinction between phenomenal world and noumenal world, and take space not as a phenomenon but as a noumenon, are bound to face Spinozism.