Three Kinds of Rationalism and the Non-Spatiality of Things in Themselves

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IN THE TRANSCENDENTAL AESTHETIC of the *Critique of Pure Reason*, Kant claims that space and time are neither things in themselves nor properties of things in themselves but mere subjective forms of our sensible experience. Call this the *Subjectivity Thesis.*¹ The striking conclusion follows an analysis of the representations of space and time. Kant argues that the two representations function as *a priori* conditions of experience, and are singular "intuitions" rather than general concepts. He also contends that the representations underwrite some non-trivial *a priori* cognition of the objects of sensible experience. The Subjectivity Thesis is then presented as an immediate consequence:

Space represents no property at all of any things in themselves nor any relation of them to each other. . . . For neither absolute nor relative determinations can be intuited prior to the existence of the things to which they pertain, thus [neither] can be intuited *a priori*. (A26/B42)

Time is not something which exists of itself, or which inheres in things as an objective determination... [Were it] a determination or order inhering in things themselves, it could not precede the objects as their condition, and be known and intuited *a priori* by means of synthetic propositions. $(A_{32}-3_{3}/B_{49})$

Kant's argument for the Subjectivity Thesis seems to have the following structure:

^{&#}x27;The Subjectivity Thesis is already found in Kant's 1770 On the Form and Principles of the Sensible and Intelligible World [Inaugural Dissertation]. That work presents a dual account of the world, first as it appears to us in space and time (Ak. 2:398–406), and second as it supposedly really is, a collection of non-spatiotemporal entities unified by real causal bonds (Ak. 2:406–10). Quotations from Kant's works, apart from the Critique of Pure Reason (Kritik der reinen Vernunft) [KrV], cite the volume and page number (Ak. volume:page) of the Academy edition, Kants Gesammelte Schriften, ed. Königlich Preussische Akademie der Wissenschaften, vols. 1–29 (Berlin: de Gruyter, 1902–). Quotations from the Critique of Pure Reason are cited according to the standard A and B pagination for the first and second editions, respectively. All translations are my own.

- (ST1) No absolute or relational features of things in themselves can be cognized a priori.
- (ST2) Some spatial and temporal features of objects of experience can be cognized a priori.
- (ST) Spatial and temporal features are not features of things in themselves.

The major premise (ST1) denies the possibility of non-trivial *a priori* knowledge of things in themselves. ² Kant explains that no features of things in themselves could be cognized "prior to the existence of the things to which they pertain" (A26/B42). Though this construction is somewhat unusual, the idea appears simple enough. The claim seems to be that we cannot have knowledge of the constitution of a mind-independent entity before we know *that* it exists. ³ On the assumption that such existence could not be established *a priori* (that is, "absolutely independently of all experience"⁴), it follows that we cannot have substantive *a priori* knowledge of the constitution of mind-independent entities. Such reasoning will be accepted by many philosophers who hold that knowledge cannot be grounded in an accidental correspondence between thought and mind-independent reality, but rather requires a suitable causal connection to what is known.

Note that Kant's exclusion of *a priori* knowledge is intended to apply *only* to things in themselves. He claims by contrast that some spatiotemporal features of objects of experience are knowable *a priori*. It is a central claim of the Transcendental Aesthetic and the *KrV* as a whole that some non-trivial knowledge of all objects of experience *does* precede knowledge of whether or not particular empirical objects exist.

At first blush, Kant's argument for the Subjectivity Thesis seems quite hopeless. One of its premises excludes *a priori* knowledge of things as they are in themselves. The other premise lays claim to *a priori* knowledge of objects of experience. Suppose then, for the sake of argument, that we cannot have either empirical or *a priori* knowledge of things in themselves, and so (ST1) is true. Suppose also that (ST2) is true, and we really can have *a priori* cognition of whatever precise spatial and temporal features of objects of experience Kant has in mind in the Transcendental Aesthetic. And suppose, finally, that things in themselves just happen to have spatial and temporal features *too*, so (ST) is false. This simple model exhibits the invalidity of the argument as reconstructed above.

Kant's contemporary H. A. Pistorius seems to have been to first to argue that the *KrV*'s central argument for transcendental idealism does not succeed in ruling out the "intelligible and thinkable" thesis that the spatiotemporal form of appearances agrees with the order of things as they really are. In the nineteenth century, Trendelenburg insisted in the same spirit on a crucial gap in the argument. Kant "hardly considered the possibility," he claimed, that there might be a harmony

²Non-trivial is needed to exclude what Kant would consider analytic or tautologous claims.

³Cf. Prolegomena to Any Future Metaphysics [Prolegomena] §9 (Ak. 4:282).

^{4&}quot;[W]e will understand under *a priori cognitions* in what follows not those that occur independently of this or that experience, but rather those that occur *absolutely* independently of all experience" (B2–3). Kant holds that *a priori* knowledge is characterized by the marks of "necessity and strict universality," either of which suffices as a "sure criterion" of its apriority (B4).

or agreement between necessary features of things as perceived in space and time and the relations and properties of things as they are independently of the mind.⁵ Vaihinger's detailed and influential analysis wholeheartedly agreed; Kant "effectively overlooked" such a possibility, partly due to "his greatest mistake—he never took it seriously."⁶

This "neglected alternative" objection, though understandable given the above reading of Kant's argument, seems absurdly at odds with the professed aim of the argument. Kant purports to establish that space and time are merely subjective forms of sensibility, that is, not also properties of things in themselves. Critics respond that he has overlooked the possibility that space and time may also be properties of things in themselves. Something is evidently amiss. Vaihinger concedes that the objection, while allegedly unanswerable, "is so *obvious*, that it must occur to everyone who does not allow himself to be corrupted by transcendental-philosophical formulations." Vaihinger thus holds that Kant failed to grasp what is obvious at once to every philosophical novice, and that he persisted doggedly in his blunder even after it was pointed out to him. This is a startling conclusion of years of painstaking scholarship by one of Kant's most eminent and influential interpreters.

The failure of the argument above might be viewed as evidence that Kant's denial of the mind-independent reality of space and time is not the ambitious metaphysical thesis it appears to be. In this paper, I do not take such a line. Kant's Subjectivity Thesis will be interpreted in what follows as the very straightforward if very ambitious doctrine that neither space nor time belongs to the ultimate constitution of reality, the way things really are wholly independent of the knowing mind. Kant's most brilliant philosophical correspondents Lambert and Mendelssohn showed no hesitation in interpreting him in this way, and he responded with clear confirmation of their interpretation, which was indeed standard in his day.

Kant's inference to the subjectivity of space and time embodies the key strategy of his mature "Copernican Revolution" in epistemology. A fundamental revision

⁵Adolf Trendelenburg, *Logische Untersuchungen*, 2nd ed. (Leipzig: von Hirzel, 1862), vol. 1, 163; also Trendelenburg, *Historische Beiträge zur Philosophie* (Berlin, 1867), 225–30.

⁶Hans Vaihinger, *Commentar zu Kants Kritik der reinen Vernunft* [*Commentar*], 2 vols. (Stuttgart: Spemann, 1881–92), vol. 2, 310–11, 144, 150–51. For similar views, see N. Kemp Smith, *A Commentary to Kant's* Critique of Pure Reason (New York: Humanities Press, 1962), 113–14; and M. J. Scott-Taggart, "Recent Work on the Philosophy of Kant," *American Philosophical Quarterly* 3 (1966), 184, where Scott-Taggart writes, "Today Trendelenburg's position is almost that of an unquestionable truth."

⁷Vaihinger, Commentar 2:311.

^{*}See for example Henry Allison, "The Non-Spatiality of Things in Themselves for Kant," *Journal of the History of Philosophy* 14 (1976), 318. For an earlier development of the deflationary interpretation of "thing in itself" of which Allison makes use, see Prauss, *Kant und das Problem der Dinge an Sich* (Bonn: Bouvier, 1974). For a fully developed version of the interpretation, see Allison, *Kant's Transcendental Idealism* (New Haven: Yale University Press, 1983), esp. chs. 1, 2, 5. For some notable criticism of this reading of Kant, see Paul Guyer, *Kant and the Claims of Knowledge* (New York: Cambridge University Press, 1987), 336–38; James Van Cleve, *Problems from Kant* (New York: Oxford University Press, 1999), 4, 8; Lorne Falkenstein, "Kant's Argument for the Non-Spatiotemporality of Things in Themselves," *Kant-Studien* 80 (1989), 265–83.

⁹See the 1770 letters from Lambert and Mendelssohn to Kant (Ak. 10:107–08; 10:115). Kant reports on this correspondence in 1772, reiterating his denial that "time is something *real*, which belongs to the properties of things in themselves," and affirming once again that space is "nothing objective" (Ak. 10:133–34; cf. A36–37/B53).

in the way the argument is understood promises a significant influence on the interpretation of Kant's transcendental idealism as a whole. The project of this paper is to offer such a revision. I will argue that the consensus that Kant's argument for the Subjectivity Thesis commits an elementary blunder is quite wrong, and rests on a simple oversight. The oversight is corrected by attending to Kant's intensive engagement with two major contemporary rationalist theories of knowledge opposed by his mature writings.

As noted, Kant presents the Subjectivity Thesis as a consequence of non-trivial *a priori* knowledge held to "flow" from the representations of space and time. The content of this *a priori* knowledge claim is usually taken as the proposition that, necessarily, if an object is given to our senses as presently constituted, ¹⁰ the object conforms to certain non-trivial (e.g., geometric, kinematic) principles. ¹¹ Given Kant's denial of the possibility of *a priori* knowledge of things in themselves, we might expect him to infer that we cannot know whether the principles held to flow from the representations of space and time apply to things in themselves. Instead, he infers that things in themselves are *non*-spatiotemporal.

A first step towards understanding this mysterious inference is made by noting that Kant's denial of the possibility of *a priori* knowledge of things in themselves marks a significant break with the influential epistemologies of his older rationalist contemporaries Christian Wolff (1679–1754) and Christian A. Crusius (1715–1775). Both thinkers uphold non-empirical knowledge of nature closely analogous to that viewed by Kant as flowing from the representations of space and time. In contrast to Kant's mature work, both thinkers treat the relevant knowledge as knowledge of a wholly mind-independent reality. Kant's own early writings *follow* these rationalist contemporaries in upholding substantive non-empirical knowledge of a wholly mind-independent reality. The Aesthetic's unargued exclusion of all such knowledge is thus especially striking.

In the discussion to follow, a closer consideration of Kant's engagement with rationalist opponents will uncover a hitherto unsuspected ambiguity in his mature doctrine of the *a priori* unknowability of things in themselves. This will lead in turn to a new interpretation of the Aesthetic's argument for the Subjectivity Thesis. The revised argument remains controversial (as is only fitting given its conclusion), but the classical charge of overlooking a realist alternative will be shown to be unsustainable. The new interpretation developed in this paper will also be in a position to furnish a solution to another famous and supposedly devastating objection to Kant's position. The objection seizes on what appears a clear inconsistency between

¹⁰Note that Kant sometimes considers the possibility of a wholly different form of perceptual connection with things than that afforded by our present form of sensibility. See *Dreams of a Spirit-Seer*, Ak. 2:336; A27/B43; A779–80/B807–08. Also: "[T]he present life is just the appearance of . . . the spiritual [world]," and "death is nothing but the end of sensibility [das Ende der Sinnlichkeit]" (R4240). (When followed by a four-digit number, 'R' abbreviates '*Reflexion*' from Kant's *handschriftliche Nachlaβ*, Ak. vols. 17, 18.)

¹¹See B40–41, B49; Ak. 2:393, 405. For an alternative interpretation of Kant's *a priori* knowledge premise, see Paul Guyer, *Kant and the Claims of Knowledge*, 364–69. For a response, see Karl Ameriks, "Kantian Idealism Today," reprinted in *Interpreting Kant's Critiques* (New York: Oxford University Press, 2003), 107–08.

¹²See Kant's Nova Dilucidatio [1755], Ak. 1:396-97.

the Aesthetic's claim that things in themselves "cannot be known at all" (A30/B45) and its conclusion that the non-spatiotemporality of things in themselves is "indubitably certain" (A48). The paradox will be removed by showing that Kant's very denial of knowledge of things in themselves incorporates a metaphysical claim that plays a vital role in his inference to the Subjectivity Thesis.

I. THREE KINDS OF RATIONALISM

The Transcendental Aesthetic's exclusion of non-empirical knowledge of things in themselves implicitly targets two influential rationalist systems of philosophy that exerted an enormous influence on Kant's intellectual development. To lay the ground for a reappraisal of the argument for the Subjectivity Thesis, I begin with a brief summary of the key features of the rejected views, and a brief contrast with relevant features of Kant's mature position.

1.1 Wolff's Ontological Rationalism

Wolff's influential development of Leibnizian rationalism is a central target of Kant's mature thought. Though this is well-known, little attention has been given to its significance for Kant's argument to the Subjectivity Thesis. The crucial feature of Wolff's position for present purposes is his defense of a kind of knowledge incompatible with the Transcendental Aesthetic's rejection of the possibility of non-trivial *a priori* knowledge of things in themselves.

We can best approach the relevant aspects of Wolff's epistemology by summarizing his view of the contribution of different mental powers in the genesis of our knowledge. He begins with the claim that confused representations of reality given to our senses can be successfully analyzed by our *understanding*, defined as a power of "distinctly representing the possible." Wolff follows Leibniz in defining the *clarity* of a representation, opposed to its confusedness, as its recognizability and distinguishability. *Distinctness* is defined as an iteration of clarity "within" a representation, that is, as the recognizability and distinguishability of separate marks (*Merkmale*) within it (GM §198, §207). According to Wolff, the understanding is distinguished from the senses and the imagination in this: "where only the latter are, representations are at best clear but not distinct—while the addition of understanding makes the representations distinct" (GM §277).

¹³ Vernünfftige Gedancken von Gott, der Welt und der Seele des Menschen, auch allen Dingen überhaupt, den Liebhabern der Wahrheit mitgetheilet [GM = German Metaphysics] (Halle, 1751), §277. (All translations from Wolff are my own.) The cognitive faculties of "understanding," "reason," and so on in Wolff differ markedly, of course, from the faculties signified by the same German terms in Kant's KrV.

 $^{^{14}}$ A *lack* of understanding for Wolff is displayed in a lack of distinctness in representations, which issues in an inability to say what is "in" them. A criterion of the possession of understanding is that someone "can tell us, what is represented *in*" their representation (GM §277).

¹⁵Kant takes this statement of the confused nature of sensibility as Wolff's canonical position (cf. Ak. 2:395; A44/B61). It should be noted that Wolff also claims *distinctness* for the *sensations* of "figures, magnitudes, and positions" (GM §§231–32), a claim that agrees with Leibniz's account in the *Meditations on Knowledge, Truth, and Ideas*, where the senses are also said to provide confused knowledge, but distinctness applies to some "notions common to many senses" including "number, magnitude, and shape." See Roger Ariew and Dan Garber, eds. and trans., *Leibniz: Philosophical Essays* [AG] (Indianapolis: Hackett, 1989), 24.

Once the properties of represented things are uncovered by the analytical powers of the understanding, the resulting truths about the world are turned over to *reason*, which is the faculty of deductive inference, or as Wolff also describes it, "the ability to have insight into the connection of truths" (GM §368).

Wolff's vital contention for present purposes is his claim that reason can furnish "insight" into particular features of reality as they are revealed in suitably distinct representations. This feat involves a logical subordination and coordination of particular features of reality under a necessary rule, so presenting these features as connected elements in an intelligible cosmological order.

Wolff argues that the most general rule, under which all others are subsumed, is the Principle of Sufficient Reason (PSR). The PSR asserts that for every feature of reality, there must be "something from which one can comprehend [begreifen] why it is" (GM §29). The centrality of the PSR to Wolff's epistemological enterprise is heavily emphasized. He explains that "since everything has its sufficient reason why it is, there must always be a sufficient reason why changes in simple things follow just the way they do, and in composite things why the parts stand in just the relation they do to each other, and also why their changes follow in one way and not another" (GM §142). The PSR is presented as entailing further cosmological rules, comparable to synthetic a priori principles of nature in Kant's mature works. ¹⁶

By subjecting the confused deliverances of the senses first to our discriminatory powers, and subsequently to reason's ability to have "insight into the connection of truths," individual truths about mind-independent entities are to be subsumed under necessary principles. Wolff employs a favorite image of Leibniz to illustrate this key paradigm of "rational" or "philosophical" knowledge of reality: "Most people," he says, "know that the sun rises early in the morning from experience and cannot say *why* it happens." "But the astronomer," who carefully subjects his particular representations of nature to the discriminatory powers of the understanding, develops "insight into the grounds of the heavenly movements and the connection of the earth with the heavens, [and] knows the same thing through reason... he can *demonstrate that, why,* and *at what time* it *must* happen" (GM §372).¹⁷ The faculty of reason, by recourse to the PSR and subsidiary principles, is thus seen as offering the prospect of an illuminating *a priori* access to particular truths, that is, as showing them to be deductively entailed by necessary principles.¹⁸

¹⁶Wolff argues for instance that the PSR requires that all motion and action in the world must occur continuously; that no body can move itself; that no body can change direction or speed of motion without an external force acting on it; that inelastic bodies of equal mass and velocity must remain at rest after a head-on collision; that motion from one place to another along a certain line must pass through "intermediate places" (GM §§608–09, §645, §676, §683, §§686–87, §690).

¹⁷"So long as something has a ground why it is, one can recognize how it can be; that is, one can *comprehend* it [begreifen], and insofar as one says it to another, explain it intelligibly [verständlich erklären]. As soon as one posits something without a ground, it is clear from what has just been said that it is incomprehensible in itself, and cannot be intelligibly explained" (GM §77). Cf. Leibniz, Monadology §28 (AG 216–17); Principles of Nature and Grace (AG 209).

¹⁸Such "rational knowledge" of nature is presented as deductively entailed only by "real definitions," "individual experiences," and "established general principles" such as the PSR and subordinate propositions (Wolff, *Philosophia rationalis sive logica* [Frankfurt and Leipzig: 1740], §498). Compare: "We say we *know* [*Wissen*] what is inferred from undoubted [*ungezweifelten*] grounds by means of correct inferences" (GM §361). Also, Wolff, *Vernünfftige Gedanken von den Kräften des menschlichen Verstandes und ihrem richtigen Gebrauche in Erkäntniss der Wahrheit etc.* (Halle: 1712), *Vorbericht* §2.

This project of rational knowledge, which exerts a powerful influence on Kant's early epistemology, ¹⁹ is grounded in a view of the PSR as an unrestricted ontological law cognizable on wholly non-empirical grounds. Wolff famously seeks a reduction of the PSR to the Principle of Contradiction, thereby effectively committing himself to the position that knowledge of formal relations among concepts can ground substantive knowledge of reality. ²⁰

There is a basic incompatibility between the epistemological project of Wolff and the starting-point of the Transcendental Aesthetic. Kant's starting-point simply excludes without further ado all non-trivial *a priori* knowledge of reality in itself. I turn now to a second contemporary rationalist epistemology that will point us to the crucial ambiguity in Kant's starting-point, leading in turn to a new reading of his argument for the Subjectivity Thesis. The epistemology in question occupies an intermediate position between Wolff and Kant's mature thought, insofar as it insists on the impossibility of *a priori* knowledge of *some* features of reality.

1.2 Crusius's Psychological Rationalism

Christian A. Crusius was an opponent of the Leibnizian philosophy who emerged as one of the most important philosophical figures in mid-eighteenth-century Germany. His writings had a particularly profound influence on the development of Kant's thought. The features of Crusius's philosophy of importance for present purposes can best be brought out by considering his main disagreements with the Wolffian picture just sketched. In general, Crusius's offensive against Leibniz and Wolff has its most pressing motive in a libertarian doctrine of freedom, which finds expression in a carefully thought-out opposition to Wolff's epistemology of rational knowledge.²¹

For Wolff, rational knowledge of a state of affairs amounts to "indubitable" knowledge *why* it is the case. Rational knowledge, for Leibniz and Wolff, is *a priori* knowledge not only in the mature Kantian sense of being non-empirical (since it is based on a non-empirical principle). Rational knowledge is also *a priori* knowledge in the older Aristotelian sense of amounting to knowledge *why*, or knowledge "through the ground." We know something *a priori* in this older sense by understanding *why* it obtains *through* whatever grounds it metaphysically.

¹⁹In the *Nova Dilucidatio* of 1755, Kant presents the principle of the conservation of momentum in Wolffian fashion as a "direct corollary" of the PSR, itself presented as an *a priori* demonstrable law (Ak. 1:407).

²⁰Wolff claims that his own efforts to prove the PSR distinguish his position from that of Leibniz, who supposedly merely assumed the PSR "as an experientially grounded proposition against which no counterexample can be adduced" (GM §30). In fact, Leibniz does sometimes attempt an *a priori* proof of the PSR, comparable to Wolff's attempted reduction (for discussion, see Robert M. Adams, *Leibniz: Determinist, Theist, Idealist* [New York: Oxford University Press 1994], 67). Leibniz's mature references to the "*two* great principles of all our reasoning" (*Monadology* §§31–32) do suggest a view of the PSR as independent of the Principle of Contradiction.

²¹Crusius's principal works are collected in G. Tonelli, ed., *Die philosophischen Hauptschriften* [*Hauptschriften*] (Hildesheim: Olms Verlag, 1964–). The discussion here will be based mainly on his major German works, *Anweisung, vernünftig zu leben* [Ethics] (1744) in *Hauptschriften*, vol. 1; *Entwurf der notwendigen Vernunftwahrheiten* [Meta] (1745) in *Hauptschriften*, vol. 2; *Weg zur Gewißheit und Zuverlässigkeit der menschl. Erkenntnis* [Logic] (1747) in *Hauptschriften*, vol. 3. All translations are my own.

For example, Leibniz and Wolff hold that God's necessary existence can be known in principle "through" the metaphysical ground of this existence in the divine essence. ²² Similarly, the existence of the world can be cognized in principle through its ground, namely, the metaphysical eminence of this world compared to the alternatives, plus God's choice of the best, determined by the PSR. Any particular state of the world is held to be cognizable through an earlier state. Because metaphysical grounds, including real causes, are thought to *double* in this way as grounds of knowledge, Wolff defines a ground in general as "that through which one can *understand why* [what is grounded] is the case" (GM §29).

Crusius's offensive against the Wolffian account begins with a more careful distinction between real grounds and grounds of knowledge. A *real ground* or cause of a state of affairs is simply whatever brings that state of affairs about. *Grounds of knowledge* (or "ideal grounds") of a state of affairs are divided into grounds of knowledge that ("a posteriori grounds of knowledge") and grounds of knowledge why ("a priori grounds of knowledge").²³ Take, for instance, the state of affairs that it is now raining. A standard example of an a posteriori ground of knowledge in such a case is an empirical perception of the state of affairs itself, which grounds knowledge that, but not why, it is raining. By contrast, an a priori ground of knowledge of the state of affairs is a possible source of knowledge "not only that, but also why" it obtains (Logic §142; Meta §35).²⁴ In the case at hand, Crusius endorses the view that the real cause of the rain, presumably the antecedent meteorological conditions, can double as an a priori ground of knowledge—a source of knowledge why it is raining.

To this point, there is little to separate Crusius and Wolff, apart from the former's fastidiousness in distinguishing real causes and sources of knowledge. In particular, it is important to emphasize that Crusius accepts the view of Wolff and Leibniz that the *a priori* ground of knowledge of a state of affairs is sometimes the very same thing that causes that state of affairs. In such cases, a real cause does double-duty as source of theoretical insight into and real cause of the effect; as Crusius writes, such a real cause serves as *principium cognoscendi et essendi simul.*²⁵ Kant's early writings wholeheartedly endorse this general epistemological framework (see *Nova Dilucidatio* [1755], Ak. 1:392).

The key point on which Crusius breaks with Leibniz and Wolff is in rejecting the view that *every* (complete) real ground is capable of doubling as an *a priori* ground of knowledge of its effect. Crusius writes,

I don't deny that we are prone, because of our nature, to always seek an ideal ground a *priori* [= *a priori* ground of knowledge] of a thing, until we reach the highest propositions of reason or find the first causes, whose truth or necessity we can doubt no further. But the question is merely whether all things *allow* of such an ideal ground

²²For Leibniz's use of this older sense of *a priori* see, for example, E. M. Huggard, trans., *Theodicy* (La Salle, IL: Open Court, 1985), pt. 1, §44.

²³For Kant's early use of such a distinction, see Ak. 1:391–92.

²⁴As Robert M. Adams points out, Leibniz treats a mathematical *reductio* as furnishing only an *a posteriori* ground of knowledge, not because he thinks a *reductio* is an empirical proof method, but because a *reductio* fails to provide insight into the *reason* for the truth of the proposition proved. See Adams, *Leibniz: Determinist, Theist, Idealist*, 109.

²⁵Crusius, De Usu et Limitibus principii rationis determinantis vulgo sufficientis [Dissertatio de Usu et Limitibus] (Leipzig, 1743), §37.

a priori from which one can understand why they are, rather than are not, and why they are one way, rather than another; or whether the essence of a real ground can be complete, without its being suitable as an ideal ground a priori in our mind; or more clearly, whether a thing cannot have a sufficient ground, in spite of the fact that this is no determining ground. (Meta §38)

Crusius's central concern arises from his libertarian doctrine of freedom. As he points out, the "sufficient ground" demanded by Leibniz and Wolff's PSR is in fact a determining ground, or a ground "through which the effect is made actual or possible in such a way that it cannot result in any other way in the same circumstances" (Meta §84). He holds that such contrary-excluding antecedent grounds exist for all events, but argues that this cannot be true of some actions producing these events. This claim presupposes Crusius's ontological distinction between actions and events, a distinction soon taken up and applied by Kant.²⁶ According to Crusius, some actions lack a determining ground in the sense that they can be freely omitted by the agent under the very circumstances in which they occur.²⁷ Crusius's denial that free acts have a determining ground is not intended as a denial that they have a real cause. The cause of free acts is held to consist in the combination of an agent's possession of a free will and the relevant background circumstances of the action. While free actions, according to Crusius, admit of no real determining ground, they all have a *sufficient* ground, where 'sufficient ground' is now defined as a ground "lacking nothing needed" for an outcome without excluding every alternative to it (Logic §143, §290; Meta §37). Crusius's determining versus sufficient distinction, influenced by Clarke's position in the famous correspondence with Leibniz, is immediately taken up by Kant.²⁸

Crusius is acutely aware of the measure of resistance to theoretical intelligibility that his commitment to absolute freedom introduces. His fundamental conviction that absolute freedom of the will is the source of all value in a soul—"the preemi-

²⁶Crusius distinguishes: 1) forces, "the possibility, connected to a thing, of something else" (Meta §29, §63); 2) actions of forces in bringing about something, "that state of the force in which it makes the contribution it is capable of in bringing about something else" (Meta §64); and 3) the effect of the force, "which must be precisely separated from the action, and is that which is brought about by the action of the force, but is separate from the action [itself]" (Meta §68). From the 1760s on, Kant insists on a similarly sharp metaphysical distinction between "happenings" (Begebenheiten) and actions: "[I]t is certainly true that everything that happens has a determining ground and follows in accordance with a determinate law from something else; but that is not a rule of the real actions which we observe in ourselves" (R4058); "Everything that happens has a ground, means that whereby I am passive and which I observe. But what I freely do is not for me something that happens" (R4013; cf. R4338).

 $^{^{27}}$ Crusius's arguments in favor of this doctrine of absolute freedom proceed from the validity of the moral law, a "fact of consciousness," the free creation of the world, and the "final purpose" of the world (cf. Meta §82–84; also Ethics, bk. 1).

²⁸In his *Dissertatio de Usu et Limitibus*, §2, Crusius approvingly cites Clarke's response to Leibniz that the "sufficient reason" for the creation of the world in one rather than another part of space might be traced simply to God's *sovereign will* (Leibniz-Clarke correspondence; Clarke paper 2, §1; paper 3, §2). Clarke's gloss on 'sufficient' reflects an older theological usage, exhibited, for example, in the Catholic contrast of "merely sufficient grace" (*gratia mere sufficiens*) and "efficacious grace"; the former is applied *only* to cases in which the will fails to choose the act for which the grace provided "sufficient" support. That Kant derives the determining/sufficient distinction from Crusius is indicated by his statement in 1755 that "the expression 'sufficient ground' is ambiguous, as Crusius has adequately demonstrated, since it isn't at once clear how far it suffices; 'Determining', however, means *a positing that excludes all alternatives*, and denotes that which definitely suffices for the thing to be grasped in one way only" (Ak. 1:393).

nent power, for the sake of which all others are there" (Meta §454)—produces one of the most characteristic features of his thought. The bounds of theoretical insight, he holds, cannot provide the ultimate measure of reality. We may know a free act through experience of it and its effects. But such an act admits of no full answer to the question, "Why?"

Should one deny the free actions of spirits, and what depends on them, because they do not admit of an ideal ground *a priori* in our understanding, and because by their nature they do not admit of such real grounds as could furnish to our understanding adequate ideal grounds *a priori*? (Logic §142)

For Crusius, then, the metaphysical conditions of freedom rule out a construal of the PSR as an *unrestricted* law. Since Wolff's epistemology of rational knowledge relies essentially on such a construal, this epistemology must be rejected out of hand.

Crusius nevertheless remains committed to the possibility of substantive *a priori* knowledge of reality incompatible with Kant's mature philosophy. He develops his own distinctive and highly dogmatic epistemology as an alternative foundation for such knowledge. It is based on two highest "material" principles of knowledge, supposedly placed in our minds by God, which supplement the "merely formal" Principle of Contradiction. A *Principle of Inseparability* asserts that what cannot be thought of as separate cannot exist separately; and a *Principle of Non-Combinability* that what cannot be thought of as connected cannot be connected. Crusius writes.

What cannot be separated in thought, cannot be separated in fact; and what cannot be combined in one concept in thought, can also not be combined in fact; even disregarding the fact that no contradiction could be derived from the [combination or separation], but only a physical necessity to think the thing in such a way . . . after a comparison of all conditions. (Logic §261; cf., Meta §15)

These highest material principles are employed as criteria of both empirical and *a priori* cognition. The first occurrence of 'cannot' in each principle signifies a psychological compulsion whose sense varies based on the kind of knowledge at issue. In the case of merely empirical knowledge, such compulsion is what one feels when "sensation presents to us [things] as connected [or separated]" (Logic §259). In contexts of *a priori* knowledge, the compulsion results from a supposed immediate grasp of necessary connections between distinct concepts. Crusius describes such an immediate grasp in terms of being "forced to think" of concepts as connected (for example) "in such a way that the one concept vanishes, or it conflicts with our whole nature, if we leave the other concept out" (Logic §259).

Non-trivial *a priori* cognition of reality, of which Crusius claims a great deal, is all derived from his two highest material principles. Through these material principles, Crusius contends, both empirical and *a priori* "propositions arise which are not identical, and which finally constitute the positive element [*das Positive*], or core, of our knowledge" (Logic §259).²⁹

²⁹Some of Crusius's key subordinate metaphysical theses are, "every force is in a subject; everything that arises does so for a [Crusian] sufficient reason; everything whose non-existence can be thought has a cause, and came into being at some time [Principle of Contingency' (cf. Meta §33)]; every substance

1.3 Kant's Restricted Rationalism

In the *KrV*, Kant rejects all non-trivial *a priori* knowledge of things in themselves, placing himself in sharp opposition to both of the rationalist epistemologies just outlined. In this section, I briefly consider some aspects of Kant's mature account of *a priori* knowledge in relation to the views of his German predecessors.

While Kant's mature theory of *a priori* knowledge is predicated on a rejection of claims to *a priori* insight into a fully mind-independent order, he remains firmly committed to substantive *a priori* knowledge of nature. His restricted rationalist position is distinguished from its antecedents by the doctrine that all non-trivial *a priori* knowledge is anchored in *merely* subjective forms of space and time. Substantive *a priori* knowledge is consequently viewed as knowledge of mere appearance.

In insisting on the necessity and possibility of substantive *a priori* knowledge of nature, Kant's mature epistemology continues to endorse a central claim of his rationalist predecessors. As he writes in the *Metaphysical Foundations of Natural Science*:

Only that whose certainty is apodictic can be termed genuine science [Wissenschaft]. Knowledge [Erkenntniß] that can only achieve an empirical certainty is not properly termed scientific knowledge [Wissen].... When the grounds or principles are merely empirical, as for example in chemistry, and the laws from which the given facts are explained through reason are mere laws of experience, they do not carry any consciousness of their necessity with them, and then the whole does not deserve the name of science in a strict sense.... A rational doctrine of nature therefore deserves the name of a natural science only if the natural laws lying at its base can be cognized a priori and are not mere laws of experience. (Ak. 4:469)

The parallel with the Leibnizian-Wolffian project of "rational knowledge" is clear. Kant thinks that knowledge "properly so-called" of a given fact means its "explanation through reason," understood as its subsumption under laws that are cognized as "apodictic" rather than "merely empirical."

In the project of subsuming natural events under apodictic laws, appeals to space and time play importantly different roles in the epistemologies of Kant, Wolff, and Crusius. Kant famously holds that "there is only that much real science in a branch of natural knowledge as there is mathematics to be found in it" (Ak. 4:470). Properly scientific knowledge of nature is thought to extend *only* as far as mathematics can reveal necessary laws of things, and knowledge of *all* such laws is presented by Kant as immediately anchored in a cognitive grasp of spatial and temporal form.

Wolff, by contrast, presents the intelligibility of spatiotemporal processes as just an instance of a more general intelligibility of reality guaranteed by the PSR. The PSR is the abstract requirement that for any feature of reality there must be something from which one can comprehend why it is; this wholly general requirement makes no reference to space or time. For Wolff, the PSR enjoys a metaphysical and explanatory priority over any particular laws of nature. His project of subsuming

is somewhere; everything that exists is at some time" (Logic §259). Crusius's lengthy discussion of the impossibility of deriving such propositions from the merely formal Principle of Contradiction, and his extended discussion of the necessity of an additional principle, anticipates in important respects Kant's famous treatment of the problem of "synthetic" *a priori* knowledge.

features of the natural world under the PSR goes so far as to attempt to reduce spatiotemporal relations themselves to relations of conceptual dependence.³⁰

Crusius seeks to anchor rational knowledge of nature in an immediate grasp of the inseparability and non-combinability of distinct concepts. This immediate cognition is not seen as involving any essential restriction to spatial and temporal features of things.³¹ Crusius thinks, for example, that the same immediate insight underwriting rational knowledge of nature also grounds such knowledge in the fields of theology and rational psychology.

All three of the rationalist epistemologies considered here make essential use of suitable general rules enabling explanatory subsumption of particular states of affairs. In Wolff's case, as in the case of Leibniz, the highest general rule is an unrestricted PSR. Crusius offers a set of rules whose warrant is said to lie in "divinely-implanted" principles of knowledge. Kant rejects both theories, anchoring all substantive *a priori* knowledge in merely subjective forms of sensible knowledge.

2. THE TRANSCENDENTAL AESTHETIC REVISITED

With this background in place, it is now possible to offer a fundamental reappraisal of the argument for the Subjectivity Thesis at the heart of the Transcendental Aesthetic. We have seen that one of its premises rules out substantive *a priori* knowledge of a wholly mind-independent order. Kant insists that "a determination or order inhering in things themselves, could not . . . be known and intuited *a priori* by means of synthetic propositions" (A32–33/B49; cf. A26/B42). With this claim, Kant firmly excludes the epistemologies of his rationalist predecessors.

How does this finding help us to address the classical objection that Kant's own argument for the Subjectivity Thesis fails to exclude a possible agreement between spatial and temporal features of appearances and the order of reality as it is wholly independent of the mind? The contemporary philosophical backdrop points to the solution by revealing a hitherto unnoticed ambiguity in Kant's claim that we cannot have *a priori* knowledge of things in themselves.

It has been assumed that Kant's denial of the possibility of *a priori* knowledge of things in themselves amounts to the claim that non-empirical knowledge of such things is beyond our cognitive reach. It becomes clear that a substantial assumption is at work here when we recall that Wolff's doctrine of the *a priori*

³⁰Wolff writes: "When among the things that exist at the same time, one thing contains the reason why the other thing next to it is at the same time... all are *thereby* connected in space with each other. When among the things that follow on each other the earlier contains the reason why the later follows ... then they follow in an order upon one another, *and so* are connected in time with one another" (GM §§546–47, §554). Wolff also presents the mathematical cognition involved in rational knowledge of nature as reducible to wholly logical truth, contrary to Kant's insistence on the extra-logical character of mathematical cognition and its dependence on *a priori* representations of space and time.

³¹Wolff's (Leibnizian) theory of space and time as "orders" of simultaneity and succession is designed to present the empirical order as a concrete "realization" of the PSR. Crusius rejects such a theory because his libertarianism is incompatible with the claim that earlier states of the world necessarily contain a determining ground of later ones. Crusius instead takes space and time to be "abstractions from the *existence*" of things (Meta §§46–57). The idea here is to emphasize a sharp distinction between the causal order of real existents and a merely conceptual order of grounds and consequences. Such a distinction, blurred by Wolff's picture of reality as a wholly intelligible order, is meant to leave room within the causal order for the contingency associated with free action.

knowability of reality does *not* reduce to a claim about our cognitive capabilities. Likewise, Crusius's doctrine that some features of reality cannot be cognized *a priori* does *not* reduce to a claim about our cognitive limitations. Leibniz, Wolff, and Crusius agree that the condition of knowability *a priori* in the older sense of knowability "through the ground" is the *existence* of a determining ground of the relevant feature of reality. Whether there is such a determining ground is not a fact about our cognitive powers at all, but rather a metaphysical fact about the relevant feature of reality.

Leibniz, Wolff, and Crusius agree that if a feature of reality has a determining ground, then there is something "through which" that feature of reality can be known in principle. Similarly, all agree that if a feature of reality lacks a determining ground, then there is nothing "through which" that feature can be known in principle. Leibniz and Wolff hold that every feature of reality has a determining ground, and that there is no truth about reality which could not in principle be known through its grounds.³² Crusius, by contrast, denies that every feature of reality has a determining ground. Since particular free acts lack determining grounds through which they could be cognized in principle, he argues, such acts are not in principle derivable from their metaphysical grounds. They are known to us through *a posteriori* grounds of knowledge—the acts themselves or their effects (Logic §142).³³

It is clear from this summary that we must distinguish two basic varieties of *a priori* unknowability as they are distinguished by Kant's immediate predecessors. Say the relation a-*unknowability* holds between a feature of reality and a particular epistemic agent if and only if non-empirical cognition of this feature of reality exceeds the agent's cognitive competence in a strong sense. Say that a feature of reality possesses the property of b-*unknowability* if and only if that feature of reality lacks a determining ground through which it could be known.

A few uncontroversial examples will illustrate the distinction: Leibniz and Wolff deny that our future free acts are *b*-unknowable, since they hold that such acts—like all features of reality—have determining grounds. But Leibniz and Wolff accept that the relation of *a*-unknowability holds between future free acts and epistemic agents like ourselves, since they hold that the analysis required to cognize free acts independently of experience strongly exceeds our cognitive powers.³⁴ By contrast, Crusius holds that free acts do have the property of *b*-unknowability. He

³²Leibniz's doctrine that there is "no [true] proposition which cannot be proved *a priori*" (*On Freedom and Possibility*, AG 19) is intended as the claim that a *sufficiently enlightened* mind could in principle know every fact about every existent by means of a purely intellectual (non-empirical) analysis applied to mere concepts of things. It is not meant as the claim that *we* can do without empirical data in cognizing existents. Similarly, Wolff's commitment to a complete explanation for the existence of whatever exists commits him to the view that a non-empirical analysis of possibles is *in principle* capable of revealing the structure of the world (for example). This is perfectly compatible with Wolff's view that our actual concept of the world is an empirical one. I am grateful to Eric Watkins for pressing me on this point.

³³It should be noted that Crusius does leave room for non-empirical divine knowledge of free acts, on the grounds that divine "non-empirical" knowledge of existents is *immediate* knowledge, rather than the result of an inference from grounds (Meta §272).

³⁴See Leibniz, Discourse on Metaphysics, ¶30 (AG 61); cf. Dialogue on Human Freedom and the Origin of Evil (AG 113).

368 JOURNAL OF THE HISTORY OF PHILOSOPHY 47:3 JULY 2009 infers from this that the relation *a*-unknowability must also hold between such acts and finite epistemic agents.

2.1 Application

One of the premises of Kant's argument for the Subjectivity Thesis denies the possibility of a priori knowledge of things in themselves. In light of the above distinction between kinds of unknowability, this denial is ambiguous, and the resolution of this ambiguity affects the argument's prospects. On the usual reading, Kant's unknowability premise reduces to the claim that a priori knowledge of things in themselves lies beyond our cognitive capabilities in some strong sense. Note however that Kant's precise formulations of his unknowability premise are not necessarily best suited to this reading. He explains, for instance, that "if [time] were a determination or order inhering in things themselves, it could not precede the objects as their condition, and be known . . . a priori by means of synthetic propositions" (A32-33/B49; cf. B41). It is striking that Kant does not simply assert that the order under consideration "could not be known to precede" things in themselves "as their condition." He rather proceeds from the metaphysical-sounding claim that the order in question "could not precede" such things as their condition to the exclusion of non-trivial a priori knowledge of the things in question. The formulation is obviously reminiscent of Crusius's argument that some features of reality are simply not determined by antecedent conditions, and for this reason cannot be cognized a priori.

Kant's argument for the Subjectivity Thesis moves from *a priori* knowledge of things insofar as they are represented in space and time, plus the impossibility of *a priori* knowledge of things in themselves (whose precise meaning remains open), to the conclusion that space and time are not objective features of things in themselves. On the traditional interpretation of the unknowability premise, the argument fails. Given the availability of stronger interpretations of the unknowability premise, we must ask whether Kant might have had one in mind.

I suggest that Kant does have a stronger interpretation of the unknowability premise in mind, and that his argument can be understood as follows: he holds that we have some substantive *a priori* knowledge by grasping constraints that "flow" from the representation of spatiotemporal form and govern everything in space and time. In this way, we are held to grasp principles (geometric, kinematic) which necessarily "precede" all spatiotemporal contents "as their condition." Kant concludes that space and time could not apply to things as they are in themselves, because he views the conditions imposed by spatiality and temporality as incompatible with a property of some things in themselves, namely, their *b*-unknowability.

This general line of interpretation does not yet pin down which of several possible arguments might be intended by Kant. Two parameters of the argument just sketched can be varied independently. One is the extent of the *a priori* knowability Kant associates with the forms of spatiality and temporality. The other parameter is the extent to which b-unknowability is attributed to things in themselves.

Consider the second issue. Leibniz and Wolff deny that *b*-unknowability is correctly attributed to any feature of reality. Crusius argues that *b*-unknowability is correctly attributed to some features of some real things, namely, to free actions.

If Kant means to attribute *b*-unknowability to things in themselves, the question is, to which features of which things in themselves? Does Kant mean to attribute *b*-unknowability merely to some states or actions of some things in themselves (like Crusius), or perhaps to some states or actions of all things in themselves, or perhaps to all states and actions of all things in themselves? As we vary the strength of Kant's unknowability premise, the validity of the argument will evidently also depend on the strength of his *a priori* knowledge premise. If the forms of space and time are seen as imposing very weak constraints of *a priori* knowability, the *b*-unknowability of things in themselves will not rule out the spatiotemporality of the same things.

Before turning to specific versions of the argument along the lines just sketched, we can already see how the proposal provides the basis of a response to one of the most famous objections leveled against Kant's mature philosophy as a whole. The objection in question contends that Kant is guilty of incoherence in coupling a rejection of knowledge of things in themselves with an insistence that things in themselves are "certainly" non-spatiotemporal.

Sympathetic commentators have sometimes sought to fend off this incoherence objection by arguing that the Subjectivity Thesis does not involve any positive determinate knowledge claim regarding things in themselves. Granting this point, the Subjectivity Thesis is evidently a non-trivial proposition, and Kant's apparently blanket denials of the knowability of things in themselves seems to undermine any possible warrant for his certainty claim.

On the proposed reading, Kant derives the Subjectivity Thesis from the *b*-unknowability of features of things in themselves, along with a premise claiming *a priori* knowledge of things in space and time. The attribution of *b*-unknowability to reality in itself is far from trivial, and Kant will require some significant warrant for it if his argument is not to be unmotivated. The key point for the coherence problem, nevertheless, is simply that the *b*-unknowability premise has the "negative existential import" discussed above—it includes a metaphysical claim that relevant features of things in themselves lack determining grounds. Remarkably then, the only substantive metaphysical premise regarding things in themselves needed for the valid inference to the Subjectivity Thesis on the proposed reading is itself given by a noumenal *ignorance* claim. If the reading is defensible, and Kant's doctrine of the *a priori* unknowability of things in themselves does incorporate the required *b*-unknowability claim, we have a simple and elegant solution to the famous coherence problem.³⁵

I now turn to a specific interpretation of Kant's argument for the Subjectivity Thesis along the lines proposed above. The intent is not to engage in a defense of Kant's premises, or to suggest that they are true. The aim is rather to identify premises that can be safely attributed to Kant, and that result in an argument that resists the traditional charge of invalidity.

³⁵For a more detailed discussion of this problem, including its relation to the issue of divine knowledge, see Desmond Hogan, "How to Know Unknowable Things in Themselves," *Noûs* 43 (2009), 49–63.

2.2 An Argument for the Subjectivity Thesis

The Transcendental Aesthetic claims that we have *a priori* knowledge of objects in space and time by grasping conditions imposed by the forms of spatiality and temporality. In the last section, I suggested that we should see the Subjectivity Thesis as based on the inference that such conditions could not apply to things in themselves because of a metaphysical property of such things, namely, *b*-unknowability. If this is correct, an inference along the following lines underlies Kant's conclusion:

- (ST1*) (Some, all) features of (some, all) things in themselves are *b*-unknowable—that is, lack a determining ground through which they could be cognized.
- (ST2*) If space and time are objective determinations of things in themselves, no features of any things in themselves have the property of *b*-unknowability.
- (ST) Space and time are not objective determinations of things in themselves.

Though this argument is at least formally valid on all four versions of $(ST\tau^*)$, it immediately raises several significant problems.

First, is it possible to demonstrate Kant's commitment to any of the versions of (ST1*)? If so, which one, and what are his grounds for holding it?

Second, does Kant accept (ST2*), and if so, on what grounds? The Transcendental Aesthetic certainly lays claim to a vaguely-identified body of *a priori* knowledge based on a grasp of necessary conditions imposed by the forms of space and time. But the Aesthetic (as opposed to later sections of the *KrV*) has not traditionally been interpreted as excluding the *b*-unknowability of features of spatially- and temporally-ordered things. Note that even if this exclusion were imputed to Kant in the Aesthetic, it would not suffice for (ST2*). This is because (ST2*) asserts that if space and time are objective forms of any things in themselves, reality in itself is *entirely* deterministic. On the face of it, it seems perfectly conceivable that space and time are objective forms of *some* things in themselves, while some features of *non-*spatiotemporal things in themselves lack determining grounds.

These problems are discussed in detail in the next sections. Section 3 shows that Kant does endorse one of the four versions of (ST1*). A large body of textual evidence demonstrates his commitment to the thesis that some features of some things in themselves are *b*-unknowable.

Section 4 shows that Kant also endorses (ST2*). His endorsement rests in part on a claim, found in the Aesthetic and elsewhere, that spatial and temporal form must apply to all or to no things in themselves. While the attribution of (ST2*) to Kant turns out to be very well-supported, the proposal that the premise is at work in the Aesthetic is more controversial. Nevertheless, I argue that this proposal is heavily favored by the available systematic and textual evidence.

3. COMMITMENT TO (STI*)

The proposed interpretation of Kant's argument for the Subjectivity Thesis requires the attribution of some version of (ST1*). An important question is whether there are grounds to attribute such a premise *apart* from the Transcendental Aesthetic's denials of the possibility of *a priori* knowledge of things in themselves, and apart

from the contribution the premise makes to a valid argument for the Subjectivity Thesis

An affirmative answer to this question is supplied by a large number of texts, concerned with the metaphysics of freedom, in which Kant endorses Crusius's thesis that *some* features of *some* things in themselves are *b*-unknowable. In the years leading up to the first appearance of the Subjectivity Thesis, Kant's theory of freedom undergoes a dramatic shift to a libertarian and incompatibilist position, contrasting sharply with the compatibilism of his early work (Ak. 1:399–405). He associates his revised account of freedom with precisely the same negative epistemological consequences emphasized by Crusius. In transcripts of metaphysics lectures delivered shortly before the publication of the *KrV*, we read:

The conditions under which reason can have insight into something are *absent* here [in the case of free actions]; these are the determining grounds [*bestimmenden Gründe*]. Our free actions, however, *have no determining grounds*, and so we can have no insight into these actions either. This is a reason to acknowledge the limitations of the understanding, but not to deny the thing itself. The subjective difficulty seems to us to be an objective one, although the subjective constraints of unintelligibility [*Unbegreiflichkeit*] are essentially different from the objective constraints of impossibility. (Ak. 28:270)

Like Wolff and Crusius, Kant here identifies the existence of a determining ground as a necessary condition of the possibility of epistemic "insight" or knowledge why something is the case. Furthermore, he now explicitly sides with Crusius in asserting that there are features of reality which simply lack a determining ground through which they might be known.

The same claim is found in a very large number of unpublished reflections dated by Adickes to the late-1760s and thereafter. Kant writes, for example, that "we need to presuppose [freedom]. But no one can *grasp* the coming about of a free action, because it is the start of all coming about" (R4180), and that "The possibility of freedom cannot be grasped because one cannot grasp any first beginning. . . . For our understanding cognizes existence through experience, but reason comprehends it when it cognizes it *a priori*, *that is through grounds*. . . . Now first beginnings have no grounds, thus no comprehension through reason is possible" (R4338).³⁶

The significance of many similar passages is not merely that they treat free actions as features of reality without antecedent determining grounds. It is that Kant presents the imputed lack of a determining ground as introducing a *metaphysical* barrier to *a priori* knowability. It is useful here to recall his well-known mature warning against assuming that *a priori* principles of experience also constitute

³⁶"In animals as in machines [there is] an external necessitation; that is why they are called *automata spiritualia*. But in humans in each case *the chain of determining causes is cut.* . . . In humans the soul is free . . . the animal is an automaton" (R₃8₅5, dated 1764–68); "Freedom is a *first ground*, and not to be understood as something that *happens*" (R₄006); "In accordance with rules of morality, there must be an *initiator*, and not just a mediate cause of events" (R₄156). The earliest signs of Kant's shift to his mature libertarian position are already visible in 1763–64, long before the first appearance of the Subjectivity Thesis in 1770. See the 1763 discussion in *The Only Possible Argument in Support of a Demonstration of God's Existence*, Ak. 2:110–11. Thanks to Karl Ameriks for drawing my attention to this passage.

"universal conditions on things in themselves" (Ak. 4:350–51). Similar warnings are explicitly motivated by an attribution of *b*-unknowability to features of reality in itself. Kant writes, for example, "it will be interesting [*sic*] not to make the conditions of our possible *knowledge of things* into conditions of things [in themselves]: for if we do this then freedom is destroyed" (R6317).³⁷

From the mid-1760s, then, Kant claims that some features of some things in themselves lack determining grounds,³⁸ and he also claims that this lack imposes a *metaphysical* barrier to the *a priori* cognizability of those features. This is consistent with the proposed interpretation of the Aesthetic's denial of the possibility of *a priori* knowledge of reality in itself, according to which Kant's denial incorporates the proposition that *some* features of *some* things in themselves are *b*-unknowable. Doubts may nevertheless persist whether (ST1*) (which from this point refers to the proposition that "some features of some things in themselves are *b*-unknowable") is compatible with well-known passages of the *KrV* appearing to express agnosticism on the issue of absolute freedom. I will return to this issue after considering the second premise of the argument.

4. FROM B-UNKNOWABILITY TO THE SUBJECTIVITY THESIS

Say that *a priori* unknowability in the sense of *b*-unknowability is held to apply to some features of reality in itself. To reach the conclusion of the Transcendental Aesthetic that space and time are not objective features of *any* things in themselves, a very strong premise regarding the *a priori* knowability of things in space and time is still needed. What is needed is something like (ST2*): If space and time are objective determinations of things in themselves, no features of any things in themselves have the property of *b*-unknowability.

Two main issues arise regarding (ST_2^*) . The first is whether Kant accepts it at all. The second is whether it is at all plausible that a premise relating spatiotemporal form and determinism underlies the Transcendental Aesthetic's argument for the Subjectivity Thesis.

4.1 Commitment to (ST2 *)

We can approach the issue of Kant's *commitment* to (ST2*) by pointing to many passages claiming that the mind-independent reality of spatiotemporal form would impose a strictly deterministic order on whatever is so formed. Kant writes, for example, "The reality of freedom *inevitably* brings with it the doctrine of the ideality of things as objects of intuition in space and time. For if these intuitions were not *mere* subjective forms of sensibility, but the things in themselves, actions would depend completely on the mechanism of nature, and freedom together with its

³⁷Cf. "All practical propositions require [absolute] freedom: it does not follow that it is impossible because we cannot grasp it. We must not take the limits of our reason for the limits of the things themselves" (Ak. 28:332–33; cf. R5185).

³⁸See especially R₃855, R₄058, R₄226, R₄338, R₄441, R₄723, R₄724, R₄742, R₄787, R₄961, R₅082; Ak. 8:13; Critique of Practical Reason (Kritik der praktischen Vernunft) [KpV], Ak. 5:96; Ak. 20:335.

consequence morality would be destroyed" (R6343; cf. Bxxvii; A536/B564; KpV5:95–97; R6317; R6349; R6353).³⁹

Kant's claim that the reality of spatiotemporal form would impose a deterministic order on what is so formed still falls short of (ST2*). This is because (ST2*) asserts that if spatiotemporal form applies to any things in themselves, reality in itself is *entirely* deterministic. We could bridge the gap here, for example, if it were possible to show that Kant holds that spatiotemporal form must apply to *all* things in themselves if it applies to any such things. This would get us to (ST2*) as a consequence of two claims: (i) if spatiotemporal form applies to all things in themselves, reality is entirely deterministic, and (ii) if spatiotemporal form applies to any things in themselves, it applies to all things in themselves.

It is notable that the Transcendental Aesthetic does bridge this remaining gap, since Kant insists there that if space and time were not merely subjective forms, spatiotemporal form would have to apply to all existents, including God:

With what right can one [limit spatial and temporal form to *some* real things] if one has antecedently made both of these into forms of things in themselves, and indeed ones that, as *a priori* conditions of the existence of things, would remain even if one removed the things themselves?—for as conditions of all existence in general they would also have to be conditions of the existence of God. If one will not make them into objective forms of *all* things then *no alternative remains* but to make them into subjective forms of our kind of outer as well as inner intuition (B71–72)

It is not easy to see *why* the reality of space and time requires that both be "conditions of all things in general"—even if we were to restrict Kant's claim to substantivalist varieties of realism. The idea is evidently that if spatiotemporal form were not merely subjective, it would antecedently shape or constrain all possible existence in the same way in which general ontological categories were understood to do so by an earlier metaphysical tradition. While precisely such an account of space and time as antecedent conditions of *all* existence is in fact defended by Crusius,⁴⁰ it remains hard to see why it should be considered the only non-subjectivist option.

What is very clear is that Kant's mature writings remain strongly committed to the claim that space and time must be objective forms either of all or of no things in themselves. In the *Critique of Practical Reason*, he again strenuously objects to the proposal that both might be objective forms merely of some things in themselves. ("I do not see how [the proponents of this proposal] justify themselves in

³⁹Passages like this one pose a problem for a standard view that Kant accepts on purely epistemological grounds the "subjectivist" thesis that non-trivial *a priori* knowledge must be knowledge of mere appearances. The claim that "if things in themselves were spatial and temporal, things in themselves would necessarily constitute a deterministic order" is an *a priori* knowledge claim, but it cannot plausibly be regarded as a claim about *mere* appearance. On the standard view, it should be a mystery how Kant thinks himself entitled to it. I will take up this question in detail elsewhere, but I note in passing that the historical emergence of Kant's mature theory of the *a priori* suggests that his subjectivist account of the *a priori* rests on a complex interplay of epistemological and metaphysical motivations.

⁴°Crusius's doctrine that *all* existents must be "somewhere and somewhen" motivates his *general* definition of 'existence' as "that by virtue of which a thing is to be met with *somewhere* and *at some time* outside of thought" (Meta §46). This doctrine is an explicit target of Kant from 1770 (cf. Ak. 2:413–14).

JOURNAL OF THE HISTORY OF PHILOSOPHY 47:3 JULY 2009 making such a distinction, or whence they get a warrant to do so" [KpV_5 :101; cf. R6317].)⁴¹

Since the main goal here is to identify premises accepted by Kant in the Aesthetic, and allowing a formally valid argument to the Subjectivity Thesis, I do not propose to dwell further on the difficulties with the doctrine that space and time are objective forms either of all or of no things in themselves. I turn instead to the most pressing objection to the proposed interpretation of Kant's argument to the Subjectivity Thesis. This concerns the component of (ST2*) linking spatiotemporal form and determinism.

4.2 Objection: (ST2*) and the Transcendental Aesthetic

There is plenty of evidence that Kant endorses (ST2*). What remains doubtful is whether the premise could have a role specifically in the Transcendental Aesthetic's argument for the Subjectivity Thesis. The problem is that the knowledge from which Kant argues in the Aesthetic has generally been seen as limited to some geometrical and kinematic constraints on the contents of space and time. Such constraints have traditionally been assumed to fall short of the requirement that the forms of spatiality and temporality impose a deterministic order. If this traditional assumption is correct, then an association of spatiotemporal form and strict determinism does not drive the Transcendental Aesthetic's argument for the Subjectivity Thesis, in spite of Kant's insistence on such an association in both earlier and later passages of the KrV (e.g., Bxxvii; A536/B564), and in spite of the centrality of such an association for his mature thought as a whole.

We might try to strengthen this line of objection to (ST2*) by pointing out that the Subjectivity Thesis is presented in the Transcendental Aesthetic as the sum of two separate results. Kant first argues that *spatial* form does not apply to things in themselves on the basis of our substantive *a priori* knowledge of such form. He then offers a parallel argument that temporal form does not apply to things in themselves. Restricting the interpretation under consideration to the case of space produces the following argument:

- (P1) Some features of some things in themselves have the property of b-unknowability.
- (P2) If space is an objective form of any things in themselves, then it is an objective form of all things in themselves.
- (P3) If space is an objective form of all things in themselves, no features of any things in themselves have the property of *b*-unknowability.
- :. Space is not an objective form of any things in themselves

The argument is valid, and we have seen evidence that Kant accepts (P1) and (P2). But (P3) poses an obvious problem. Why would Kant, or anyone, endorse

⁴¹Some of Kant's formulations of this claim provide further support for (ST2*) by associating a realist metaphysics of space and time with Spinozism. In transcripts of lectures given shortly before the appearance of the *KrV*, we read, "If I take space as an entity in itself, then Spinozism is irrefutable . . . space is [then] the Godhead, it is single, omnipresent, *nothing can be thought outside of it, everything is in it*" (Ak. 28:567).

the proposition that spatial form imposes deterministic order? Since the mere subjectivity of space is presented as a separate conclusion, it seems that the Aesthetic's argument for the Subjectivity Thesis could not, after all, be based on an underlying association of spatiotemporal form and determinism.

4.2.1 First Response: Strengthen Unknowability Premise

I consider two responses to this objection. The first response—which is ultimately rejected—amends the proposed interpretation. The interpretation as it stands employs the premise that some features of some things in themselves lack determining grounds through which they could be known. A more sweeping "metaphysical" reading of unknowability *a priori* provides the basis for the revision. Kant's immediate predecessors understand *ontology*, in line with a long Aristotelian tradition, as a science of categories or forms conditioning all possible existents (*scientia praedicatorum entis generaliorum*, in Baumgarten's description⁴²). Now consider interpreting Kant's doctrine of the *a priori* unknowability of things in themselves as the premise that things in themselves are not conditioned "prior to their existence" by *any* such ontological forms.

If such a (striking) premise were imputed to Kant, a valid argument for the Subjectivity Thesis would not require an association of spatial form and causal determinism. It would be enough that the Aesthetic also holds that if spatial form applies to things in themselves, it constitutes a "condition on existence in general." An interpretation along these lines might be suggested by the *KrV*'s introduction of the doctrine of the mere subjectivity of spatial form. This conclusion is required, Kant says, because there is no other possible account of a form "which precedes the objects themselves, and in which the concepts of these objects can be determined a priori" (B41).

While a revised interpretation along these lines can sidestep the issue of the relation of spatiotemporal form and causal determinism, it nevertheless seems clear that it should be rejected. There is a large body of textual evidence demonstrating Kant's commitment to the proposition that some features of things in themselves are *b*-unknowable. There is no unambiguous textual evidence, as far as I know, for the revised "ontological" reading of the *a priori* unknowability claim. Furthermore, the claim itself is so strong that it lacks any independent philosophical plausibility.⁴³

4.2.2 Second Response: Uphold (ST2*)

I therefore turn to a second response to the objection against an association of spatiotemporal form and determinism in the Aesthetic. This response argues that there are, after all, strong grounds to think that such an association underlies Kant's inference.

⁴²Baumgarten, Metaphysica (Halle, 1757), §4; reprinted at Ak. 17:4.

⁴³Alternative readings of the doctrine of the *a priori* unknowability of things in themselves might be attempted, based on the thought that things in themselves are not antecedently conditioned in this or that ontological respect. It would not be satisfying, of course, if Kant's *a priori* unknowability premise turned out to be the claim that existences are not antecedently determined specifically as *spatial* and *temporal*, where the Subjectivity Thesis is then derived from the Aesthetic's assumption that the reality of space and time *would* impose such an antecedent condition.

The considerable evidence for this conclusion has not historically been given the weight it deserves, I think, for three relatively straightforward reasons. The first reason is that the Aesthetic's argument from geometrical knowledge to the ideality of space does not at first appear to connect to the issue of the causal structure of nature. A strong connection does emerge, as we will see, upon closer examination of Kant's position.

The second reason is that the *KrV* presents judgments of causality as requiring the (relational) categories, and the theory of categories is first introduced later than the Transcendental Aesthetic. Note, however, that the *KrV* also presents mathematical judgment as requiring categories of quantity and quality, and the Aesthetic undoubtedly appeals to mathematical knowledge. If an association of spatiotemporal form and determinism is at work in the Aesthetic, it will involve some anticipation of later sections of the *KrV*. But *any* reading of the Aesthetic seeking to ascribe a unified mature epistemology to Kant must assume a good deal of such anticipation.⁴⁴

The third and perhaps most significant reason a possible association of spatiotemporal form and determinism in the Aesthetic has been overlooked is that such an association would not on its own suffice for the Subjectivity Thesis. A premise along the lines of (STr^*) is also required, and interpreters have lacked the distinction between types of *a priori* unknowability required to connect such a premise to the text of the Aesthetic. Given the evidence in favor of a commitment to (STr^*) , its possible candidacy in the Aesthetic immediately brings Kant's mature association of spatiotemporal form and determinism into sharp focus.

If an association of spatiotemporal form and determinism does underlie the argument for the Subjectivity Thesis, how does it figure in Kant's argument from geometrical knowledge to the mere ideality of space? The important issue in evaluating this argument is the epistemic role Kant envisages for the *a priori* knowledge from which he advances. Attention to this role brings the interdependence of his ideality arguments into view.⁴⁵

When we look to the epistemic role of the geometrical knowledge from which the mere ideality of space is derived, we find that Kant does not merely treat such knowledge as knowledge of the form of empirical reality.⁴⁶ He also insists that mathematical knowledge (and especially geometrical knowledge) is the anchor

⁴⁴The issue of the relation between the Transcendental Aesthetic and later chapters of the *KrV* is complicated by the fact that the argument of the Aesthetic is taken in large part from the *Inaugural Dissertation* of 1770, and so derives from a period before Kant's theory of categories was even conceived.

 $^{^{45}\}text{It}$ is notable that at the outset of the Aesthetic, the ontological options presented for consideration include the reality of both space and time on the one hand, and the mere ideality of both on the other. ("What then are space and time? Are they real entities? Are they merely properties or relations of things, but such as would pertain to them even if they were not intuited; or are they relations that only attach to the form of intuition alone . . ." [A23/B37].) There is no suggestion that one form might be real and the other merely ideal, and this already implies a view of the component inferences of the Subjectivity Thesis as closely intertwined.

⁴⁶ [Geometry] would be nothing but a playing with a mere figment of the brain were it not that space has to be regarded as a condition of appearances which constitute the material for outer appearance" (A157/B196). On this topic, Charles Parsons, "Arithmetic and the Categories," reprinted in *Kant's Philosophy of Mathematics*, ed. C. Posy (Dordrecht: Kluwer, 1992), 137–38; Vaihinger, *Commentar* 2:275–86.

of *all* "rational knowledge" of the causal order in space and time. We have already encountered his central mature doctrine that "there is only that much real science in a branch of natural knowledge as there is mathematics to be found in it" (Ak. 4:470). The claim expresses Kant's epistemological ideal of a complete mathematization of rational knowledge of the causal order on the foundation of a grasp of spatial and temporal form.⁴⁷

This important theme is somewhat obscured by the *KrV*'s distinction between narrowly mathematical knowledge and knowledge of the causal structure of nature, the latter falling under the rubric of 'philosophical knowledge' (A724/B752). While Kant certainly distinguishes mathematical and causal knowledge—a distinction for which he has several crucial motives⁴⁸—the important issue here is how he conceives of their relation. The *KrV* has little enough to say on this subject, though Kant asserts that mathematical and philosophical knowledge "offer each other their hand in natural science" (A726). While the claim is vague, it is in line with Kant's doctrine that rational knowledge of nature extends only as far as the applicability of mathematics.

Discussions of particular causal laws in other texts offer some further insight. In the *Prolegomena*, Kant famously argues that the fundamental "physical law of reciprocal attraction, extending to all material nature" can be seen to "reside as necessary" in properties of the *circle* and the *sphere*, and "therefore is customarily presented as cognizable *a priori*" (*Prolegomena* § 3 8, 4:321). Rather than separating geometrical features of space from the fundamental dynamic or causal constitution of nature, Kant here asserts that the dynamic constitution itself "rests on laws that the understanding cognizes *a priori*, *and indeed chiefly from universal principles of the determination of space*" (ibid.).⁴⁹

A similar theme is evident in the *Inaugural Dissertation*'s presentation of *a priori* knowledge of causal laws as derivable from the representations of space and time. Kant writes that "pure mathematics deals with space in geometry and *time* in *pure mechanics*" (Ak. 2:397), and further that "all observable events in the world, all motions and all internal changes necessarily accord with the *axioms which can be known about time*" (Ak. 2:402).50 And in a highly significant addition to the Bedition of the Transcendental Aesthetic, Kant asserts that the representation of

⁴⁷In the *Inaugural Dissertation*, Kant writes; "The evidence in demonstrations is not only greatest in geometry; it is the only evidence there is in the pure sciences, and it is the paradigm and the means of all evidence in the other sciences" (Ak. 2:403). For anticipations of this theme in earlier work, cf. *Nova Dilucidatio*, Ak. 1:396–97; *New Theory of Motion and Rest*, Ak. 2:16–19; *Negative Magnitudes*, Ak. 2:168–69; *Dreams of a Spirit-Seer*, Ak. 2:331.

 $^{^{48}}$ One of the motives is the desire to block efforts (like those of Spinoza and Wolff) to apply mathematical *method* in philosophy (cf. A726–38/B754–66). Another motive is Kant's application of the concept of causation *more widely* than in merely spatiotemporal contexts, precisely in his key doctrine of transcendental freedom (cf. KpV, Ak. 5:6, 54–56).

⁴⁹For notable opposition to the view that Kant envisions a wholly *a priori* derivation of the principle of gravitation, see Michael Friedman, *Kant and the Exact Sciences* (Cambridge, MA: Harvard University Press, 1992), ch. 4.

⁵⁰Koriako astutely notes in his recent work on Kant's theory of mathematics that the *Dissertation*'s picture of pure mechanics as flowing from the representation of space shows that, in 1770, "Kant is of a mind to count pure mechanics as belonging to pure mathematics." Darius Koriako, *Kants Philosophie der Mathematik* (Hamburg: Felix Meiner Verlag, 1999), 125.

time underwrites a "body of *a priori* synthetic knowledge exhibited in the *general doctrine of motion*, which is by no means unfruitful" (B49).

Kant's special addition to the Aesthetic of the claim that the representation of time underwrites *a priori* knowledge of laws of motion is of enormous significance to the question at hand, given the centrality of the laws of motion in the modern debate on freedom, determinism, and mind-body relations. As Kant notes in an unpublished reflection, it was precisely Leibniz's innovations in the *doctrine of motion* that led him to an account of the physical realm as causally complete, and to the rejection of occasionalist theories of mind-body action. ⁵¹ Strikingly, a Kantian reflection dated to the 1780s insists that the causal completeness imposed by the *doctrine of motion* excludes the Crusian view that agents could act as uncaused causes in the midst of the empirical order. ⁵² The Aesthetic's invocation of *a priori* knowledge of the doctrine of motion thus directly links its argument to the *KrV*'s famous claim that "all alterations occur in accordance with the law of the connection of cause and effect." ⁵³ It is hard to see why Kant should have inserted his reference to *a priori* knowledge of laws of motion if not to underline this connection.

This brief discussion suffices to demonstrate that there is strong if neglected textual and systematic evidence in favor of the present proposal that Kant conceives of space and time *in the Aesthetic itself* as sources of *a priori* knowledge of nature as a deterministic order. The proposal is consistent with textual evidence indicating that Kant's mature association of spatiotemporal form and causal determinism goes back at least to 1769.⁵⁴ It is consistent also with Kant's remark in the B-preface

⁵¹See Leibniz's letter to Christian Wolff of December 8, 1705: "I would not have arrived at my system of harmony without previously knowing the laws of motion which overturn the systems of occasional philosophy" (C. I. Gerhardt, ed., *Briefwechsel zwischen Leibniz und C. Wolff* [Halle, 1860], 51). The same claim is found in the *Theodicy* (pt. 1, §61), and Kant makes explicit reference to this Leibnizian motivation: "Leibniz presumably intended his pre-established harmony so that . . . all changes in the physical world must occur in accordance with laws of mechanism, for otherwise, if a spirit moved them [bodies], the center of gravity of the universe would move, and if this spirit did bring about motions in accordance with the laws of action and reaction, a change in the world would occur that was not in accordance with the law of causation" (R6006).

⁵²"Neither through a miracle, nor through a spiritual being can a motion be brought about in the world, without producing just as much motion in the opposite direction, thus in accordance with the laws of action and reaction. . . . Motions cannot begin by themselves, nor through something that was not itself in motion; and freedom and miracles are not to be met with among the phenomena . . ." (R5997, dated between 1780–89; contrast Meta §385; cf. Meta §29, §63, §68). Note also Kant's early and mature claim that the equality of action and reaction can be derived from the nature of spatial properties (Ak. 2:16; 4:544–45).

⁵⁵Note also a well-known passage of the Second Analogy that purports to derive the general causal principle (every event has a determining cause) *directly* from a supposed *a priori* feature of the time-series: "Now if it is a necessary law of our sensibility, thus a formal condition of all perceptions, that the preceding time necessarily determines the following time (in that I cannot arrive at the following time except by passing through the preceding one), then it is also an indispensable law of the empirical representation of the temporal series that the appearances of the past time determine every existence in the following time" (A199/B244).

⁵⁴See especially the famous R5037, in which Kant explains that the discovery of the antinomies in 1769 led him to his idealist position (a claim reinforced in a letter to Garve of September 1798, Ak. 12:257). A number of reflections dated to 1769 present the PSR as a law governing the empirical realm, but also *restricted* to that realm (cf. R4007, R4012, R4172, R4174, and R4225). The *Inaugural Dissertation* of 1770 might appear to be temporarily back on the fence regarding the association of spatiotemporality and deterministic order. For that work presents the principle that "everything in the [sensible] world happens in accordance with the order of nature" as a merely regulative principle of

that the Aesthetic's proof of the Subjectivity Thesis "removes an obstacle which stands in the way of the employment of practical reason, nay threatens to destroy it" (Bxxv; cf. A536/B564).

5. FREEDOM AND THE TRANSCENDENTAL AESTHETIC

An important objection to the proposed interpretation remains, based on passages of the *KrV* in which Kant appears to express agnosticism concerning the reality of freedom. The proposed interpretation depends on premise (ST1*), but the *KrV* asserts that it is impossible to demonstrate even "the *possibility* of freedom . . . because from mere concepts *a priori* we cannot cognize anything about the possibility *of any real ground* or any causality" (A558/B586–A567/B585).

This claim is striking, because as several commentators have noted, other passages of the *KrV* strongly suggest that we do have theoretical grounds for asserting our absolute freedom (e.g., A546/B574). Furthermore, transcripts of Kant's lectures delivered shortly before the appearance of the *KrV* claim that absolute freedom can be demonstrated on theoretical grounds (Ak. 28:268–69; cf. R4336; R4338; R4723; R5552). There is evidence that Kant accepts the theoretical demonstrability of absolute freedom both before and immediately after the appearance of the *KrV* in 1781.⁵⁵ Karl Ameriks has responded by interpreting A558's denial of the demonstrability of the "real possibility" of freedom as a denial of freedom's theoretical *explicability*—rather than a denial that we could be justified on theoretical grounds in claiming absolute freedom (cf. Ak 20:270).⁵⁶ This suggestion is plausible, and dovetails nicely with the interpretation developed here, since the impossibility of a theoretical explanation of freedom is demanded by the kind of *a priori* unknowability that Kant attributes to free acts.

There is indeed strong evidence that Kant eventually comes to reject all attempts at theoretical proof of absolute freedom, replacing them with his famous argument that the reality of absolute freedom is cognizable as a condition of the validity of morality. The *Critique of Practical Reason* (1788) asserts that morality, viewed as an *a priori* "fact of reason," furnishes a "non-theoretical" warrant for knowledge of freedom.⁵⁷ In the 1787 preface to the B-edition of the *KrV*, the emphasis on moral

philosophical enquiry (Inaugural Dissertation §30, Ak. 2:418). In fact, the Inaugural Dissertation's position is consistent with Kant's earlier and later doctrine that determinism is constitutive of spatiotemporal order. Consider Kant's mature claim that spatiotemporal order imposes determinism and yet that "supernatural" influence in this deterministic order is metaphysically possible in cases of divine grace. Given Kant's endorsement of this supernatural possibility—which plays an important role for him in some practical contexts—it is natural for him to insist, as the Inaugural Dissertation does, that the exclusion of any appeal to supernatural influence is a regulative principle of natural explanation.

⁵⁵The deduction of the moral law in *Groundwork* 3 (1785, Ak. 4:446–63) is generally interpreted as still proceeding from an attempted theoretical proof of freedom. See Karl Ameriks, *Kant's Theory of Mind* (New York: Oxford University Press, 1982), ch. 6, for an in-depth discussion.

⁵⁶Ameriks, "Kant's Deduction of Freedom and Morality," *Journal of the History of Philosophy* 19 (1981), 55–58.

⁵⁷"The concept of a pure [moral] will already contains the concept of a causality with freedom, hence a causality that is not determinable in accordance with laws of nature, and hence is *not* capable of any empirical intuition as proof of its reality, but which nevertheless *perfectly justifies its objective reality a priori* [for the sake of] the pure practical law" (*KpV*, Ak. 5:55; cf. Logic §3, Ak. 9:93). In many mature texts, Kant speaks of our *knowledge* on practical grounds (he uses both '*Erkenntnis*' and '*Wissen*') of the reality of freedom (cf. Ak. 20:310; *Critique of Judgment*, Ak. 5:469; *KpV*, Ak. 5:4).

grounds is evident. Kant argues that a proof of the "real possibility" of a concept "need not be furnished by theoretical sources of knowledge, *but may be found in practical sources*" (Bxxvin). In an undated note penciled into his own copy beside the A558 passage cited above, Kant writes that freedom is to be demonstrated as a condition of morality: "*Morality* is that which, if it is correct, absolutely demands freedom. If the former is true, then freedom is proved" (Ak. 23:42).⁵⁸

Kant's eventual opting for a purely moral grounding of freedom may seem to threaten his argument for the Subjectivity Thesis as interpreted above. For it is a central claim of Kant's mature epistemology that a proposition assented to on moral grounds may not conflict with deliverances of theoretical reason. If there is such a conflict, theoretical reason always trumps practical presuppositions. According to the *KrV*'s B-preface, a contradiction between practical and theoretical reason in the case at hand would require the outright rejection of freedom:

If we grant that morality necessarily presupposes freedom (in the strictest sense) as a property of our will; if, that is to say, we grant that it yields practical principles—original principles, proper to our reason—as a priori data of reason, and that this would be absolutely impossible save on the assumption of freedom; and if at the same time we grant that speculative reason has proved that such freedom does not allow of being thought, then the former supposition—that made on behalf of morality—would have to give way to this other contention, whose opposite contains an obvious contradiction; consequently freedom and with it morality . . . would have to yield to the mechanism of nature. (Bxxviii–xxix)

Kant emphasizes this point again in the *Critique of Practical Reason*'s discussion of the "primacy" of practical reason in its connection with speculative reason. He writes that theoretical conclusions embraced on the basis of their "inseparable connection" to practical reason "*must not contradict*" theoretical reason (Ak. 5:120). It is *only* when practical reason does not contradict theoretical reason that we can conclude that "in the union of pure speculative with pure practical reason in one cognition, the latter has primacy" (Ak. 5:121).

Note, however, that since Kant himself comes to claim "knowledge" (both *Wissen* and *Erkenntnis*) of absolute freedom on practical grounds, he does not accept that deliverances of theoretical reason could threaten premise (ST1*). His position is thus that while practical reason may never contradict demonstrated findings of theoretical reason, it *does* in fact ground knowledge of a metaphysical barrier to theoretical *a priori* knowledge of the real order.

6. CONCLUSION

I have proposed that the *KrV*'s central argument for the Subjectivity Thesis is valid, and proceeds from premises central to Kant's mature thought. This proposal goes strongly against the consensus of more than two centuries of scholarship, which sees the argument as overlooking the possibility of an agreement between the spatiotemporal form of appearance and the form of reality as it is "in itself." The proposed reading also furnishes a new response to the traditional charge of

⁵⁸This idea of a practical warrant for upholding transcendental freedom is also visible in texts dating to the 1760s and 70s (cf. Ak. 28:332–33; R4156). Moral proof is also already a central component of Crusian epistemology; cf. the moral proof of freedom in his *Anweisung*, *Vernünstig zu Leben*, §42.

inconsistency directed against the conjunction of the Subjectivity Thesis and the doctrine of the unknowability of things in themselves.

Proponents of the neglected alternative objection have traditionally conceived of the possibility overlooked by Kant as a broadly-Leibnizian agreement between the orders of appearance and reality.⁵⁹ By attending more carefully to Kant's engagement with contemporary varieties of rationalism, we have found that this objection misses a crucial point of his mature denials of the possibility of *a priori* knowledge of the real order. Against the Leibnizian insistence on an unrestricted intelligibility of reality, Kant sides with Crusius in imposing metaphysical restrictions on *a priori* knowledge. His argument for the Subjectivity Thesis expresses an opposition to an unrestricted rationalism that goes beyond any merely epistemological scruples about Leibnizian and Wolffian appeals to the PSR.⁶⁰

Kant's disagreement with Crusius regarding the metaphysical price of absolute freedom reflects differences in their conceptions of the nature and possible sources of *a priori* knowledge. Kant's position is concisely summarized in a now-familiar passage: "The reality of freedom *inevitably* brings with it the doctrine of the ideality of things as objects of intuition in space and time. For if these intuitions were not mere subjective forms of sensibility, but the things in themselves, actions would depend completely on the mechanism of nature, and freedom together with its consequence morality would be destroyed" (R6343).

The association of spatiotemporal form and strict determinism underlying Kant's reasoning rules out an account of free acts as non-determined features of an otherwise deterministic empirical order. Crusius defends just such an account, and it leads him to anchor *a priori* knowledge in his "divinely-implanted" principles rather than Wolff's unrestricted PSR. Kant sees a decisive epistemic advantage in his "Copernican" alternative: associate spatiotemporal form with intelligible order, and treat spatiotemporal form as merely subjective. The solution, Kant believes, avoids Crusius's *deus ex machina*: his conveniently-posited harmony between psychological principles governing the connection and separation of concepts and metaphysical principles governing reality in itself.⁶¹

The proposed interpretation of Kant's argument for the Subjectivity Thesis presents a more unified picture of his theoretical philosophy in a number of respects. First, the argument of the Aesthetic emerges as closely continuous with the Analytic's general doctrine of nature. Second, the interpretation reveals a much closer connection between the *KrV*'s diverse argument strategies for the Subjectivity Thesis. Kant explains in a famous but problematic note that his mature doctrine of space and time was first inspired by struggles with conflicting claims of reason. ⁶² The claim has traditionally posed a serious difficulty, since the argument

⁵⁹This is the view, for example, of Pistorius, Eberhard, Trendelenburg, Vaihinger, and Kemp Smith.

⁶⁰Kant writes, "According to the Wolffian philosophy, if all our actions—even if every use of reason—were predetermined in time, so long as the concepts through which we determined ourselves to action were distinct, these actions would be free. *The characteristic feature of the Critique is that it does not do this* [sic]" (R6322).

⁶¹See *Prolegomena* §36, Ak. 4:319–20; B167; Letter to Reinhold, Ak. 11:41; R4446; R4893.

⁶²"I saw this system as though in a twilight. I tried in all seriousness to prove propositions and their opposites, not in order to construct a skeptical philosophy, but because I suspected an illusion of the understanding—to discover, wherein it was concealed. The year '69 gave me great light" (R5037).

of the Aesthetic is presented in the *KrV* as the main support of the Subjectivity Thesis. The usual solution has been to admit a historical role for the antinomies in first motivating the Subjectivity Thesis, and a later ancillary role in anchoring it, while assuming that the (supposedly invalid) argument of the Aesthetic eventually displaced such inspiration as the central pillar of Kant's idealism.

The interpretation proposed here goes some way towards bridging the gap between Kant's different argument strategies. The Transcendental Aesthetic's argument itself depends on a contrast between the *a priori* cognizability of things in space and time and a metaphysical barrier to such cognizability in the real order. The interpretation thus connects the argument of the Aesthetic much more closely to Kant's own account of the origin of his idealism, while respecting his sharp methodological distinction between the Aesthetic's direct proof of the Subjectivity Thesis, and the apagogic arguments of the Antinomies.⁶³

I have argued that the central presupposition of Kant's mature practical philosophy plays an essential role in his main argument for Transcendental Idealism. Such a conclusion is at odds with the received view that Kant arrives at his idealism on the basis of considerations which are wholly independent of his practical philosophy, even though this idealism turns out to be, by his lights, *uniquely* suited to safeguard the indispensable presupposition of his practical philosophy. It is noteworthy that Kant's preparatory notes for a major late essay on his philosophy claim that "the origin of the critical philosophy is *morality*, with respect to the imputability of action" (Ak. 20:235). Elsewhere, he asserts even more bluntly that "the system of the *Critique of Pure Reason* turns on two *cardinal points* as a system of nature and of freedom, from which each leads to the necessity of the other [*sic*]: the ideality of space and time and the reality of the concept of freedom" (R6353; cf. R6344, R6349). This paper has shown that these claims need not be seen as puzzling, misleading, or inconsistent with the letter of the Transcendental Aesthetic.⁶⁴

⁶³I can thus agree with Ameriks's recent emphasis on the importance of the antinomies for Kant's idealism, while rejecting his view that the Aesthetic's premises could entail at best that transcendental realism about space and time is "pointless and mysterious" (*Interpreting Kant's Critiques*, 30). It is notable that the idea of fundamental conflicts of reason is not at all unprecedented in the German rationalist tradition. While Wolff seeks to present a picture of thought and its object in perfect agreement, such antinomial conflicts are very important to Crusius. They are viewed as evidence of a misleading "desire for distinctness," which leads us to mistakenly posit ideal grounds *a priori* where demands of morality exclude their existence (Meta §38, Logic §431). Crusius even addresses this issue in an explicit theory of "conflicting proofs" (*widerstreitende Beweise*). The source of such conflicts is described as "our mode of representation and the limits of our understanding." They are resolved, as for Kant, by distinguishing between "real" and merely "ideal" entities (Logic §156).

⁶⁴For helpful comments on earlier versions of this paper, I am grateful to Robert M. Adams, Donald Ainslie, Michael Della Rocca, Paul Guyer, Sukjae Lee, Calvin Normore, Nick Stang, Eric Watkins, and Allen Wood, as well as to audiences at Harvard University, Indiana University at Bloomington, University of California at San Diego, and Yale University. I am also grateful to participants in a graduate seminar at Princeton University, and to an anonymous reviewer for the *Journal*.