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What's Really Wrong with Postmodernism?

This paper offers a new critique of postmodernism by focusing on the inadequacy of postmodernism's underlying philosophy of mathematics, which we argue is more philosophically fundamental, and yet compatible with more common critiques of postmodernism, such as those exposing its self-referential incoherency. We define postmodernism as any philosophical system assuming a critique of the objective nature of rationality. Thus, firstly, this paper is devoted to a brief historical overview and argument for this understanding, with an emphasis on the implicit conception of mathematics (and reason) within it, which we argue is largely Kantian. We then turn to an analysis of Kant's theory of mathematics as it appears in the First Critique and the Prolegomena. Finally, we argue as follows: if Kant's theory of mathematics is incorrect, then postmodernism's "metaphysical" pretensions as a critique of rationality, which both arise from and refer back to a Kantian view of mathematics, are bankrupt. The paper concludes by suggesting that the affirmation of intelligibility's reality implies a theistic metaphysics, uniting philosophical and theological reason

Key words: postmodernism, Heidegger, Nietzsche, Kant, philosophy of mathematics.

"Postmodernism" is used in many ways, often functioning as an umbrella term for historical and thematic trends in thinking not limited to philosophy, with broad and varied meanings across the humanities in general. Thus, in this paper, we must narrow the scope and establish a working definition of postmodernism before offering our critique.

In general, by postmodernism, we mean simply *any* philosophical system that assumes, whether implicitly or explicitly, a critique of the objective nature of rationality itself. Such an understanding of postmodernism, we shall argue, makes sense both historically and conceptually. It also covers a rather large scope of post-enlightenment philosophical tradition, which includes not only 19th and 20th Century French and German thinkers (including Nietzsche, Heidegger, and Foucault), but also “modern” philosophers extending back to Kant and, as we shall argue, even Descartes¹. The first part of this paper then is devoted to a brief historical overview and argument for this understanding of postmodernism, with an emphasis on the implicit conception of mathematics (and thus reason) within it, which we shall argue, again, is largely Kantian. We then turn to a brief but somewhat detailed analysis of Kant’s critique of mathematics as it appears in the *First Critique* and the *Prolegomena*. Finally, we argue as follows: *if* Kant’s theory of mathematics is incorrect, as we, like most, believe that it is, then postmodernism’s “metaphysical” pretensions as a critique of rationality itself, which both arise from and refer back to a Kantian view of mathematics, are bankrupt. In short, then, our argument offers a new critique of postmodernism that is compatible with more common critiques, such as those that expose its self-referential incoherency, and at the same time more philosophically fundamental, focusing on the inadequacy of its underlying philosophy of mathematics².

¹ While we acknowledge that “postmodernism” is a broad and often contested term, our definition does not claim to encompass every possible iteration or self-description of postmodern thought. There are, of course, exceptions and nuances among individual thinkers. However, we argue that there is a discernible throughline – a shared conceptual pattern – that justifies discussing these figures and ideas under the general category of postmodernism. Thus, our goal is not to impose a rigid taxonomy but to identify a coherent philosophical tendency that unites the figures under discussion in ways that are both historically and conceptually significant.

² It should be noted that our critique of postmodernism via the route of mathematics is not the first, or at least, that a conversation regarding mathematics vis-à-vis postmodern thinking (writ large) has already occurred in the writings of Alain Badiou (most notably his *Being and Event* and *Manifesto for Philosophy*). Badiou argues for a return to Platonism albeit a “Platonism of the many” (as opposed to the One). While there exist similarities in our present work and Badiou’s (e.g. his use of Gödel), the differences are significant. Where Badiou seeks a return to mathematics and to Platonism to ground his theory of “fidelity to the event” so as to ground or found subjectivity, he largely remains, for his purposes, uninterested in addressing any critique of reason and cognition in postmodernism writ large, whereas for our present work this critique remains central. Moreover, Badiou does not address, to our satisfaction, the problem of

Our argument also serves as a crucial critical-philosophical foundation for theological hermeneutics. Our insistence that intelligibility has real ontological status that is irreducible to subjective construction anticipates a rather obvious theological claim: that intelligibility and meaning (*logos*) necessitate a further ontological ground, namely an Intellect. That is, if the ontological status of intelligibility is affirmed, as it remains undeniable, then a theistic conclusion becomes not merely compatible but necessary, since only a divine intellect could account for the existence of objective, transcendent intelligible structures. In this sense, our argument provides a metaphysical bridge between philosophical critique and theological hermeneutics, showing that any defense of intelligibility implicitly defends the very conditions for intelligibility, as well as reason, truth, and revelation itself. Thus what follows, though philosophical, should therefore be read as preparatory to theology, as it defends the very conditions that make revelation intelligible and possible.

As it is often used in academic settings, postmodernism means simply the mid- and later 20th century French reception of the German thinking from the late 19th and early 20th centuries³. The most prominent French thinkers include Sartre, De Beauvoir, Foucault, Derrida, and Lyotard, and the German sources are primarily Nietzsche and Heidegger. This French reception of German thinking often concerned itself with the ethical dilemma following the Second World War, specifically how to frame and explain, but also prevent, the radical violence and victimization of Nazism. Thus, postmodernism's primary concern was, and still is to today, one of explaining the origins of radical victimization so as to prevent it occurring ever again. Now postmodernists appear to be in unanimous agreement on the source of such victimization, namely, reason, along with its byproduct "absolute

the "ontological status of intelligibility" (See below). (Cf. A. Badiou, *Being and Event*, New York: Bloomsbury 2013).

³ That Postmodernism is, historically, the French reception of German philosophy, particularly Heidegger, has been argued most notably perhaps by Dominique Janicaud. See D. Janicaud, *Heidegger in France*, Bloomington: Indiana University Press 2015. Charles Guignon and Derk Pereboom argue that Postmodernism is precisely the French reception of Nietzsche and that Postmodernism is quite synonymous with "neo-Nietzscheanism." See *Existentialism: Basic Writings*, ed. C. Guignon, D. Pereboom, Indianapolis, in: Hackett Publishing 2001), p. 94. Countless attempts have been made to unearth an underlying "logic" or structure to Postmodernism quite akin to ours presented here. See D. Armitage, *Philosophy's Violent Sacred*, East Lansing, MI: Michigan State University Press, 2021, pp. ix-xviii.

truth” – sometimes fashionably referred to as “essentialism.” At its core then postmodernism is a critique of reason, a critique of truth, and a critique of essences and essentialism, including categories and categorization itself, as structurally hegemonic, and thus liable to always already marginalize and victimize⁴.

This idea that absolute truth, or “essentialism,” is violent and prone to victimization is certainly not unfamiliar. It often takes form as a critique of religious fundamentalism, contending that narrow visions of truth lead to violence through marginalization and victimization. It is certainly not our view, then, that what gets called in these and other contexts “essentialism” never leads to violence. The much broader postmodern claim, however, that the exercise of reason in all contexts of truth-seeking is always already a violence to be exposed and rejected is, we contend, untenable⁵.

That truth or essences *inherently exclude* is found in thinkers from De Beauvoir through Derrida. Butler’s critique of gender essentialism, Foucault’s critique of scientific discourse, and Derrida’s critique of phallogocentrism are striking examples. They present many and various hegemonic discourses of the West, which include not only Patriarchy but also medicine, the asylum, and the prison system (to name just a few). Postmodernism critiques reason, *precisely because*,

⁴ Stephen Hicks has argued that Postmodernism is driven by this ethic, which in the end proves to be a recapitulation of Marxism’s ethic against classist victimization. See S. Hicks, *Explaining Postmodernism*, Roscoe, IL: Ockham’s Razor Publishing 2011, pp. 1-20, 135-170. That, according to postmodernism (writ large) categories are essentially hegemonic and marginalizing, in a Foucauldian and Marxist context in particular, see for example: C. Butler, *Postmodernism: A Very Short Introduction*, Oxford: Oxford University Press 2002, pp. 44-52. See also, S. Kelly, *Understanding Postmodernism*, Downers Grove: InterVarsity Press 2007, pp. 166-186, 203ff.

⁵ It is worth noting that our definition, understanding, and thus unpacking of postmodernism as a “critique of reason” ought not to be confounded with anti-realism *simpliciter*. While postmodernism’s eventuality lies in an anti-realist or at least skeptical metaphysics, not all anti-realists necessarily would fall under the purview of the postmodern. For example, thinkers such as Ockham or Hume, we argue, are not postmodernists despite their critiques of reason and realism, since such critiques never ascend directly or apply fully to rationality itself. That is, what distinguishes a postmodern fully from an antirealist is the willingness, in our estimation, to critique and thus dispense with reason entirely. Further on, although in what follows, we argue that elements of Descartes’ philosophy lead and materialize into postmodernism, since Descartes at no point commits fully to a critique of reason, he would thus not fit the label of “postmodern.” For a discussion of antirealism and postmodernism, see S. Kelly, *Understanding Postmodernism*, pp. 141-165, see: D. Armitage, *Philosophy’s Violent Sacred*, pp. 93-106.

it claims, reason (logos) victimizes, hegemonizes, excludes, and marginalizes. As Foucault, Butler, and Derrida, and many following them often argue, rational discourses masquerade as reasoned positions of truth about essential relations (categories, essences) when underneath they are really self-perpetuating structures and expressions of power that marginalize. As Butler argues, for example, not only social categories of gender but putatively biological categories of sex as well are collections of performances posing as the norm by posing “the Essence”. So also for Foucault with discourses on “sexuality”. The same point can be made for racial categories, and indeed categories in general, as it is for Derrida and the metaphysics of presence⁶. Again, the underlying worry in these various critiques is the same: reason, truth, essences are dangerous constructs because they not only purport to describe the ways things are, but prescribe how they ought to be. That is, essences presume to present the “nature” and “order” and “purposes” of things, just as Aristotle describes in *Physics* that the “nature” of nature is the formal cause, which is simultaneously the teleological cause as well. Postmodern thinkers thus remain wary of truth, rationality, and essentialism, due to their inherent tendency to marginalize and oppress⁷.

Now this ethical critique of essentialism derives its language from two founding sources: Heidegger’s “soft” *deconstructive* phenomenological critique of reason as “the metaphysics of essence,” and Nietzsche’s “hard” *destructive* critique of reason as the mere guise of the will to power’s *ressentiment*. Both Heidegger and Nietzsche understand Western culture to be dominated by Western metaphysics, which is really to say “Platonism”—the theory of reality that “splits the world in two,” where the visible world of appearances is grounded on the invisible, super-sensible world of ideas or essences. For Heidegger, Western metaphysics as the “metaphysics of essences” remains problematic since it reduces all the many meanings of being to one. Thus, metaphysics is violent because it is reductionistic, and

⁶ See e.g. J. Derrida, *Writing and Difference*, Chicago IL: University of Chicago Press 1978, pp. 79-152. Charlotte Witt describes and delineates precisely this anti-essentialist ethical argument in not only Butler, but in Feminism writ large C. Witt, *Philosophical Topics*, “Anti-Essentialism in Feminist Theory” 23 (2) (1995), pp. 321-344. While this remains the tacit assumption, as well, in nearly all of Foucault’s writings, Foucault delineates in the fourth part of first volume of his *The History of Sexuality* the various ways in which categories vis-à-vis sexuality are used to control and thus exclude, see: M. Foucault, *The History of Sexuality: An Introduction*, Vol. 1, New York, NY: Vintage Books 1990, pp. 81-91.

⁷ See the above footnote.

it is this reductionism, for Heidegger, that is playing itself out in the hegemony of modern science and technology – the hegemonizing processes in service to the reductionistic essentialism Heidegger refers to in his influential essay on technology as *Gestell*, or the “framework”⁸. The problem for Heidegger with this reductionism is that it leads to a “techne model” of comportment toward the world, wherein the “true” idea or essence is discovered only to be violently instantiated in the world. This is the so-called “fascism of Plato”⁹. According to this interpretation, in a kind of Kantian manner, I conform the world to my idea. It is precisely this worry about the fascism of the “techne model” that lurks behind postmodern critiques of essentialism, since, again, Essences tend to violently exclude and marginalize.

The idea that reason is violent in a more thorough and absolute sense comes from Nietzsche and his critique of Western culture and Judeo-Christianity as the *ressentiment*-laced morality of slaves, the metaphysical implications of which “splits the world in two.” Indeed, in *Zarathustra*, Nietzsche writes that revenge is “the will’s revulsion against time and its passing”¹⁰. Slave resentment not only hates the powerful and splits the world in two so as to imagine the eternal torments of the masters in another world, but even more deeply, such resentment hates time itself qua becoming, qua change, and thus posits rational categories over and against the flux of time so as to stabilize

⁸ M. Heidegger, *The Question Concerning Technology and Other Essays*, New York, NY: Harper and Row 1997, p. 19. Heidegger’s most explicit identification of metaphysics with Platonic essentialism occurs in his lengthily discussions of metaphysics in his *Contributions to Philosophy*, as well as a more focused treatment in *The End of Philosophy and the Task of Thinking*, see: M. Heidegger, *Contributions to Philosophy: On the Event*, Bloomington: Indiana University Press 2012, pp. 133-175; M. Heidegger, *Basic Writings*, San Francisco: Harper San Francisco 1993, p. 432. It is to be noted that Heidegger’s critique of essential via Platonic metaphysics is the fundamental distinction between Husserlian and Heideggerian phenomenology, as the former sought to uncover essences of phenomena through the method of free variation; the later, on the other hand, identifies essences with the Platonic Idea qua ground, presence, etc. and seeks to uncover a more pre-thematic understanding of being via phenomenology. For a treatment of Heidegger’s realism and essentialism vis-à-vis Platonic essentialism qua reductionism, see: D. Armitage, *Heidegger and the Death of God*, New York: Palgrave Pivot 2016, pp. 70-84.

⁹ Hannah Arendt develops Heidegger’s critique of metaphysics into an ethical/political critique of the “techne model of politics,” see: H. Arendt, *The Human Condition*, Chicago, IL: University of Chicago Press 1958, pp. 220-230.

¹⁰ F. Nietzsche, *Thus Spoke Zarathustra*, trans. W. Kaufmann, New York, NY: Modern Library 1995, chapter 2, section 20.

it¹¹. Essences, truth, reason and even being itself remains a kind of a “metaphysical revenge” against reality; they are nothing more than slavish coping mechanisms, steeped in hate, that seek to take flight to another world of stability over and against the “true world” of becoming and flux. It is here that postmodernists find agreement – again, truth, essences, and rational categories are essentially violent.

Nietzsche also has a much “softer” critique of reason, which focuses on reason’s will to truth self-destructing as it becomes self-aware, with the advent of Darwinism, as nothing more than will to power in disguise. That is, for Nietzsche, there remains absolutely no reason to trust the cognitive faculties, since such faculties are merely the result of Darwinian adaptations that proved beneficial for survival. (Evolutionary theorist Donald Hoffman has recently argued for this position in his book, *The Case against Reality*)¹². In essays such as *On Truth and Lie in the Extra-Moral Sense*, this view leads Nietzsche to a kind of radical nominalism, which later gets appropriated, for example, quite explicitly by Butler in *Gender Trouble*, wherein Butler argues that not only gender but “biological sex” itself remains a mere construct¹³. The general move is this: there are no kinds or categories beyond language in any domain to which language refers, and thus our uses of language are always only expressions of a non-rational, inherently violent will to power. Whichever way you slice it, though, the critique of rationality and essentialism remain the common root to all philosophic methodologies that we describe here as “postmodern.”

Do Nietzsche and Heidegger contain a common original source in their critiques of reason? Heidegger himself contends that Nietzscheanism is merely the playing out of the subjectivist framework inaugurated by Kant, which was already conditioned by the Cartesian turn¹⁴. In other words, Heidegger recognizes that, at least for Nietzsche, Kant and Descartes remain the taproot, and that Nietzscheanism remains an eventuality once the human subject (qua Cogito) is taken to be the

¹¹ Ibidem. See also F. Nietzsche, *The Will to Power*, New York, NY: Vintage Press 1968, para. 579.

¹² See D. Hoffman, *The Case Against Reality*, New York, NY: W.W. Norton and Company 2019, pp. 1-21, 40-52.

¹³ J. Butler, *Gender Trouble*, New York, NY: Routledge Classics 2006, pp. 144-193.

¹⁴ For Heidegger’s thesis on the relation between Descartes and Nietzsche, see: M. Heidegger, *Nietzsche. Volume IV: Nihilism*, New York, NY: Harper and Row 1982, pp. 123-139. See also: *Nietzsche’s Word God is Dead*, in: M. Heidegger, *The Question Concerning Technology and Other Essays*, pp. 53-114.

ground of first philosophy¹⁵. It is our endeavor, again, to look more carefully at these Kantian and Cartesian roots to postmodernism and find another, and perhaps the more fundamental root to postmodernism specifically in the Kantian Intuitionism¹⁶.

Critiques of postmodernism often (rightly) focus on the self-referential inconsistency of anti-essentialist and anti-rationalist claims. For example, Heideggerian anti-essentialism provides phenomenological description as an alternative to logocentric reason, only to use the very categories of reason and logic to articulate its phenomenological claims. Moreover, such phenomenological descriptive claims quickly devolve into mere arguments from authority, as such arguments admittedly do not and cannot have recourse to logic and reason. Postmodernist claims that follow more directly Nietzsche's route, namely that behind the guises of reason and logic are power, also fall prey to self-referential incoherence (of which Nietzsche himself remained fully aware); for any claim grounded on something more fundamental than reason and logic loses universality and necessity and is thus, again, admittedly for Nietzsche, "irrational" or "illogical", resulting in such claims as there is no truth is true. However, these credible objections to postmodernism notwithstanding, we think an additionally important angle to any critique of postmodernism ought to concern itself with a problem that can best be described as "the ontological status of intelligibility". That is, do intelligible objects such as numbers, mathematical laws, and logical laws exist objectively and independently of

¹⁵ That postmodernism finds its roots in Descartes and Kant has also been taken up by Peter Lawler, who argues that postmodernism is essentially "hyper-modernism" since it merely unravels the fundamental assumptions of Kant. See P.A. Lawler, *Postmodernism Rightly Understood: A Return to Realism in American Thought*, Washington D.C.: Rowan & Littlefield 1999. As noted above, Heidegger also traces the unraveling of the logic of Nietzscheanism from Descartes through Kant, arguing that the Platonic metaphysical world retreats inward in Descartes, becoming disconnected from the world in Kant (absent God as the epistemological guarantor), and fully realized as nothing but the sheer will to power in Nietzsche (see: fn. xiii).

¹⁶ Since the Kantian philosophy of mathematics later developed by Brouwer into "Intuitionism" is so widely and tacitly assumed in the literature, we use these terms interchangeably here. As John Sallis writes, "Kant's general view of mathematics has been highly developed into one of the major schools of mathematical thought in this century by Brouwer and Heyting: Intuitionism. J. Sallis, *Kant and the Spirit of Critique*, Bloomington: Indiana University Press 2020. p. 34. For a detailed analysis of the foundations of Intuitionism in Kant see M. Ardashir, *Kant's Influence on Brouwer*, "Wisdom and Philosophy" 1 (1) 2005, pp. 6-15. For a lengthy discussion of Kant, Intuitionism, and Platonism, see: R. Tieszen, *After Gödel*, Oxford: Oxford University Press 2011, pp. 24-50.

the subject, or not? Aside from the problems of self-referential coherence, this very basic philosophical question often goes unnoticed and unanswered in postmodern discourses, largely due to a kind of tacit acceptance of the Kantian framework that, we believe, hangs upon Kant's theory of mathematics. It is to Kant we shall now turn with this question regarding intelligibility's ontological status.

Kant's thesis on the nature of mathematics is well known, thus it would be unnecessary to rehearse its entirety in detail. However, there are several salient ideas that touch upon Kant's thesis, which lead Kant to argue in favor of his position, and, which in turn, have led us to argue against it. Kant's thesis is, simply put, that mathematical knowledge is "synthetic *a priori*", meaning that unlike analytical knowledge, which extracts information already contained implicitly in our concepts, synthetic knowledge gains information beyond the mere play of concepts. Moreover, according to Kant, such knowledge or information that is acquired contains both universality and necessity, and contains both precisely because sensible intuition – namely, space and time – from which concepts extract new information are *a priori* forms of such sensible intuition. Thus, for example, when one is to construct a geometric proof empirically, one can conclude from such a proof that the knowledge, proven or gained, goes beyond that, or any other particular construction and applies universally and necessarily. It seems then, at least at first, that Kant's ontological claims are forced from his epistemic commitments. That is, since Kant recognizes the apodicticity of mathematical knowledge, but cannot or will not permit such knowledge to be about reality in itself, in this case mathematical objects, he is forced to argue that the "abstraction" from particular to universal knowledge must be by way of a prior given sensibility – in the case of geometry, pure spatiality. In other words, how is it possible that when I prove something mathematically, I am certain that the proof applies universally and necessarily? Either I am intellectually perceiving or intuiting, via abstraction, in perhaps a Platonic fashion, some independently existing intelligible reality beyond space/time, or, space/time, as *a priori* forms of sensation, permit me to conclude universality and necessity regarding appearances in the world but not reality in itself. Since Kant rules out the Platonic explanation, namely that the mind can access intelligible realities themselves via intellectual intuition, he must make recourse to his transcendental idealism, which argues that not only are concepts/categories provided by the subject, but pure space and time are as well.

Furthermore, Kant appears, by his own admission, to be conflating epistemic access with ontological status, or at least deriving the latter from the former. Kant writes that mathematical objects are “given in the very knowledge of them” (A87-88/B120)¹⁷. But while it may be true that new mathematical knowledge is gained in constructing a proof, it simply does not follow that *what* is proven applies only to appearances – to the way things are only under a certain description, to objects constructed by *a priori* categories and forms of sensibility – and not to reality in itself, to the way things really stand. Unless of course, one already accepts Kant’s framework.

A further problem arises. Namely, what support is there for the Kantian claim that mathematical knowledge applies only to experience, insofar as such knowledge constitutes the backbone of nearly all scientific hypotheses and our best current and ongoing efforts to advance our understanding of the world? Kant purports to solve this problem of *quid juris* in his *Transcendental Deduction* by showing that the subject’s categories apply to objects in the world insofar as such categories condition the very possibility of experience, that is, of the experience of objects. However, Kant only argues that these categories apply to objects as they appear and not as they are in themselves, thus appearing to argue in a circle. According to Kant, mathematical knowledge is only about the world as it appears and not as it is in itself; thus, Kant can and must say that we know *a priori* of things only what we as subjects place into them. The problem then of the “unreasonable applicability of mathematics” to the world remains unsolved insofar as Kant has only shown in his *Deduction* how categories of thought apply to *a priori* sensation – how categories are “schematized” in *a priori* space and time¹⁸, but not how, or why, such schematized categories are applicable to any reality beyond subjectivity or subjectivity’s constructs.

Returning to Kant’s philosophy of mathematics, there appears to be an underlying tacit assumption within Kant’s proto-Intuitionism, namely that mathematical truth and provability coincide. That is, that mathematical truth in a very real sense is reducible to *provability* qua

¹⁷ Citations of Kant’s *Critique of Pure Reason* are taken from Norman Kemp Smith’s translation. I. Kant, *The Critique of Pure Reason*, transl. N. Kemp Smith, New York, NY: Palgrave Macmillan 2003.

¹⁸ Although Kant’s reflections on the schematism of categories follow the *Transcendental Deduction*, it necessarily explains the manner in which the categories apply to experience insofar as it is the categories, fused with a *a priori* sensation, that enable such application, namely by providing in advance an *a priori* “look” as a standard of judging such future applications.

construction in empirical intuition, which later becomes universalizable due to a *a priori* intuition. Kant writes,

“Mathematical knowledge is knowledge gained by reason from the construction of concepts. To construct a concept means to exhibit *a priori* the intuition corresponding to the concept” (A713/B741). Thus, one knows a mathematical truth is “true” for Kant insofar as one can construct such a proof *a priori* in intuition, which is to say construct the proof first empirically and then trusting its universality and necessity due to the *a priori* nature of sensible intuition. It is in this sense, then, that mathematical objects are given *in the very knowing of them*, according to Kant.

The single figure we draw is empirical, and yet it serves to express the concept without impairing its universality. For in this empirical intuition we consider only the act whereby we construct the concept, and we abstract from the many determinations (for instance, the magnitude of the sides and of the angles), which are quite indifferent, as not altering the concept “triangle” (A713/B741).

But the question remains: Are there mathematical propositions that are true but not strictly speaking “provable”? Gödel’s two Incompleteness theorems become problematic for any Intuitionist, including Kant, who wishes to argue that mathematical truth and provability remain inextricably bound. Indeed, Gödel believed his proofs pointed quite clearly to an undeniable Platonism as the root of any philosophy of mathematics, since if truth extends beyond provability – which is to say, a human construction – then Platonic intellection would be the only manner of explaining how one could both know a truth and yet be unable to prove such a truth¹⁹.

Gödel’s proofs, according to Thomas Nagel, present the “best anti-reductionist argument of all time,” since Gödel was able to *prove* that mathematical truth cannot be reduced to *provability*; construction in any formal axiomatic system is such that there will always be true propositions in any formal system that we know to be true, but that cannot be proven²⁰. The idea that mathematical truth extends beyond provability, again, leads for Gödel to Platonism, since such mathematical truth extends well beyond our subjective constructs of it and thus appears to exist independently and be knowable outside of such subjectivity. Gödel proves this by showing that a coded

¹⁹ For a thorough treatment of the Platonism implied by Gödel’s two Incompleteness Theorems, as well as the development of Intuitionism from Kantianism, see: R. Tieszen, *After Gödel*, pp. 24-50.

²⁰ T. Nagel, *The Last Word*, Oxford: Oxford University Press 1997, p. 74.

self-referential sentence, G , that reads “ G is unprovable in this system”, results in either inconsistency or incompleteness. Either we recognize the sentence as true and unprovable, in which case the system is incomplete, or we prove it, which in turn results in both G and $\sim G$, and thus inconsistency, since if G were provable, then G would be false. The philosophical insight that can be gleaned from Gödel’s proofs vis-à-vis Kant is, again, that there are mathematical truths, which are self-evidently true, that remain true beyond construction²¹. Richard Tieszen summarizes the rejection of Intuitionistic foundations following the results of Gödel:

The first incompleteness theorem suggests that the abstract concept of objective arithmetic truth transcends our intuition (or constructive abilities) at any given stage, in the sense that we know we can always constitute additional instances of this concept at various times that we have not yet intuited or constructed... The concept of arithmetic truth then appears to be known as an identity (or “universal”) through these differences which “transcends” the construction of the specific instances at any given stage in time. This identity (or “universal”) is “outside of” or “independent of” each particular intuition (construction)²².

However, and perhaps more importantly, what of mathematical propositions that are true and unprovable, but not self-evident? Are there any such mathematical truths? If there were not any such truths, one might possibly attempt to squeeze the Kantian framework to fit with Gödel’s results, perhaps arguing that the self-evidence of any true mathematical proposition is self-evident precisely by way of a *a priori* intuition, which would safeguard the truth against any independent, Platonic existence²³. However, a “self-evident” truth in precisely this sense – for example, a Gödel sentence that is self-reflexive, unprovable, and yet self-evidently true – still extends beyond the bounds of a Kantian construction in space and time. What makes such a Gödel sentence true has nothing to do with construction from, say, intuition of spatiality. Moreover, Gödel himself argues explicitly against Intuitionism in favor of the Platonic rationalism precisely because of

²¹ That Gödel’s Incompleteness proofs prove difficult to reconcile with Intuitionism, particularly Intuitionism’s insistence on equating mathematical truth with provability, see P. Raatikainen, *On the Philosophical Relevance of Gödel’s Incompleteness Theorems*, “Revue Internationale de Philosophie” (2005) 59 (4), pp. 516-517.

²² R. Tieszen, *After Gödel*, 47.

²³ For a more detailed critique of Intuitionist’s notions of truth and self-evidence, see P. Raatikainen, *Conceptions of truth in Intuitionism*, “History and Philosophy of Logic” 25 (2) (2004), pp. 131-145.

recent advancements in mathematics, since Intuitionism simply cannot account for non-intuitive mathematical truths. Given such recent advancements as the Axiom of Choice, for example, from which it is possible to derive the Well Ordering Theorem, any suggestion that such mathematical foundations can be based on subjective intuition, as Gödel contends, remains simply untenable. Similarly with Transfinite Numbers, the Continuum Hypothesis, and the derivation of the Banach-Tarski Paradox. These advancements in mathematics did not, and indeed could not make recourse to subjective intuition. Cantor's work with transfinite numbers, for example, obviously cannot obey the strict demands of Intuitionist standards of truth, since these numbers *qua transfinite ipso facto* cannot be constructed or imaged by the finite human subject. Gödel himself writes that,

the negative attitude towards Cantor's set theory... is... only the result of a certain philosophical conception of the nature of mathematics, which admits mathematical objects only to the extent to which they are interpretable as our own constructions, or, at least, can be completely given in mathematical intuition. For someone who considers mathematical objects to exist independently of our constructions and of our having an intuition of them individually... there exists, I believe, a satisfactory foundation of Cantor's set theory in its whole original extent and meaning, namely axiomatics of set theory interpreted in the way sketched [i.e. Platonism]²⁴.

Now, according to Kant's *Transcendental Dialectic*, metaphysics remains impossible as a science since it extends the use of categories beyond sensible intuition. Mathematics and natural science, on the contrary, operate within the strict bounds of sensible intuition (*a priori* and empirical). Yet in light of the above-mentioned advancements, it seems, then, for Kant, that modern mathematics is itself, by definition, *metaphysics*, insofar as it uses concepts beyond the bounds of sensible intuition. Indeed, modern mathematics, cannot get off the ground without recourse to the transcendence of not only intuition (e.g. again, transfinite numbers), but construction and provability as well.

Even given modern mathematical advances that render Kant's theory of mathematics rather obviously incorrect, or, at best, obsolete (consider, for example, non-Euclidian geometries), there remains nevertheless a strictly philosophical problem with reducing mathematics (and by proxy, logic, since mathematics depends upon it) to subjectivity's construction – or, *a fortiori*, its creation. For as Heidegger sees it,

²⁴ K. Gödel, *What is Cantor's Continuum Problem?*, in: *Kurt Gödel: Collected Works*, vol. II, pp. 254-270, from R. Tieszen, *After Gödel*, 41.

“pushing” it to the extremes of subjectivism, Kant’s system appears, in the end, to be “grounded on an abyss (*ab-grund*)”. For Kant’s entire conceptual framework, including his account of sensibility itself, remains contingent upon the transcendental imagination. Indeed, Heidegger shows that Kant’s schemata as a priori determinations of time, which condition experience, and which are, according to Kant, constitutive of mathematical intuition, can very well precede categories and sensibility, in the sense that nothing within Kant’s system prevents them from doing so, once Kant grounds the categories’ synthesis with sensibility on the transcendental imagination²⁵. Rational categories, then, would be mere abstractions from such “schemata.”

On this reading, a priori determined space-time, produced by the imagination’s *productive synthesis* of pure sensibility, functions to ground experience. Thus, the problem, for Kant, of the heterogeneity between a priori rational categories and a priori sensibility, which the schematism sought to solve, is rendered moot, insofar as there exists, in schemata themselves (as a priori determinations of sensibility) a more fundamental and already existing homogeneity. Pure categories separated from pure sensibility, then, are mere abstractions from schemata *produced and determined by* the imagination. Kant indeed recognizes this in a curious footnote:

Space, represented as object (as we are required to do in geometry), contains more than mere form of intuition; it also contains combination of the manifold, given according to the form of sensibility, in an intuitive representation, so that the form of intuition gives only a manifold, the formal intuition gives unity of representation. In the Aesthetic, I have treated this unity as belonging merely to sensibility, simply in order to emphasize that it precedes any concept, although, as a matter of fact, it presupposes a synthesis which does not belong to the senses but through which all concepts of space and time firstly become possible. For since by its means (in that the understanding determines sensibility) space and time are first given as intuitions, the unity of this a priori intuition belongs to space and time, and not to the concept of the understanding... (B 160 a)

Thus, Kant here admits that pure sensibility as something separate from determination or synthesis (by rational categories) is a mere abstraction. The problem, then, with Kant’s admission is that it allows Heidegger to argue for a grounding of the entire conceptual apparatus – that is, reason itself qua the cognitive faculties – on imagination.

²⁵ Heidegger’s reading, of course, works only for Kant’s *A Deduction* and likely explains why Kant rewrote the entire Deduction. Nevertheless, Heidegger’s reading points to the tenuous and precarious structure of Kant’s system.

If schemata, as a priori conditions for experience, remain the ground of categories, and not the other way round, then rational categories lose their universality and necessity becoming mere abstractions from an already determined sensibility produced spontaneously by imagination.

In Kant's system, the a priori imagination was said to synthesize sensibility according to the rules of the categories; however, if categories remain mere abstractions to an already existing, synthesized sensibility, then rationality no longer remains fundamental. In that case, then, the achievements of rationality are neither universal nor necessary, as the imagination's synthesis would be spontaneous, lawless, and perhaps even arbitrary. In short, then, rational categories lose their universality and necessity when grounded and fixed upon imagination, which acts "creatively" rather than constructively, and which leads, according to Heidegger, to a deeper subjectivism than Kant was willing to admit. It is in this way, then, that Kant "looked into the abyss, but withdrew"²⁶. And it is in this way that Heidegger's reading shows that within the Kantian framework remain the seeds for its own demise, collapsing into a radical skeptical subjectivism, the poisoned fruits of which later take shape explicitly in postmodern critiques of reason and intelligibility.

Returning then to the question concerning the ontological status of intelligibility, in this case, the reality of mathematical, and, we should add, logical objects, it seems one must grant some kind of objective "reality" to these intelligible objects. It is not our concern here to attempt to discover precisely how or in what manner these objects *are*, but simply to determine that they are, and must be, in order to have a coherent understanding of these objects in line with the basics of best current mathematics.²⁷ In short, these objects cannot in anyway be held to be constructed by the subject without forfeiting coherence. Thus, Kantian Intuitionism is, in fact, false.

Prior to Heidegger, Nietzsche had already unraveled the Kantian framework to its "logical" conclusion, namely subjective perspectivism. That is, as noted earlier, Nietzsche rightly saw within Kant the seeds of subjectivism, once rational cognition, including the enterprises of

²⁶ M. Heidegger, *Kant and the Problem of Metaphysics*, Bloomington: Indiana University Press 1997, pp. 112, 117.

²⁷ For a thorough treatment of the metaphysical and ethical implications of mathematical realism and anti-realism, see: J. Clarke-Doane, *Morality and Mathematics*, Oxford: Oxford University Press 2020.

mathematics and physical science, were held to be grounded in the subject. Nietzsche, however, contends that reason itself is a mere guise for the subject's value construction motivated by the will to power. Concerning mathematics in particular, Nietzsche writes:

Number – the invention of the laws of numbers was made on the basis of the error, dominant even from the earliest times, that there are identical things (but in fact nothing is identical with anything else)...When Kant says “the understanding does not draw its laws from nature, it prescribes them to nature”, this is wholly true with regard to the *concept of nature* which we are obliged to attach to nature... but which is the summation of a host of errors of the understanding. – To a world which is *not* our idea, the laws of number are wholly inapplicable...²⁸

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Kant accepts that objects conform to our minds and that what we find in nature is only that which has been put there by our subjectivity. This admission fits with Nietzsche's Darwinian understanding of rationality's will to truth as the outgrowth of survival and power, which is not interested in truth. On this view, our cognition is not geared to a discovery of truth, but rather to concepts of the world that aid in control, dominance, and, ultimately, survival. It becomes difficult to see how Kantianism does not immediately dissolve into Nietzscheanism, then, once the understanding becomes *prescriptive*, and the cognitive faculties, mathematical objects, and logic are held to be rooted in subjectivity. If rationality is grounded ultimately on human subjectivity and not *in itself*, then claims to universality and necessity fall apart. Nietzsche therefore can plausibly claim that:

Not “to know” but to schematize – to impose upon chaos as much regularity and form as our practical needs require. In formation of reason, logic, the categories, it was *need* that was authoritative: the need, not to “know”, but to subsume, to schematize, for the purpose of intelligibility and calculation ... No pre-existing “idea” was here at work, but the utilitarian fact that only when we see things coarsely and made equal do they become calculable and usable to us... The categories are “truths” only in the sense that they are conditions of life for us...²⁹

So we agree with Nietzsche, at least to this extent: If rationality is wholly conditioned by the human subject, then rationality itself, and all that depends upon it is undermined; reason's claims to universality and necessity, if grounded in nothing but human subjectivity, cannot hold.

²⁸ F. Nietzsche, *Human All Too Human*, Lincoln NE: University of Nebraska Press 1986, para. 19.

²⁹ F. Nietzsche, *The Will to Power*, para. 515.

Nietzsche's radicalization of Kant forces the question concerning the ontological status of intelligibility to the fore. Is that which orders the world (e.g. numbers, concepts, etc.) independent of human subjectivity, or does such ordering arise from the human subject? If the latter, then it is difficult to see how, again, Nietzscheanism does not follow, since reason and justification would be grounded upon nothing more than human subjectivity, and thus a certain arbitrariness – the arbitrariness of power – would always be at work in reason's application. Is intelligibility fundamental? Is it the "last word," as Thomas Nagel suggests? Or is intelligibility a product of human subjectivity?

Although Kant agreed with Hume's general empiricist critique of Rationalism, he nevertheless could not follow Hume in his radical critique of all intelligibility, particularly Hume's contention that mathematics has no existential import, no non-utilitarian justification in its application to the world. Instead, Kant was convinced that mathematics is not merely the dissection of analytic concepts, but that it is genuinely informative, a branch of knowledge of synthetic *a priori* propositions. The proposal Kant makes to explain how such knowledge could be possible is his hypothesis concerning the relation between the mind and the world. However, if the Kantian explanation of mathematics fails, as we have argued it indeed does, then the intellectual motive for accepting Kant's hypothesis – that reason does not and cannot discover what genuinely is the case regarding things in themselves – must be abandoned. Thus, we return to our original thesis, namely, that if Kant's framework concerning the foundations of mathematics is incorrect, then postmodernism fails, as there remains no compelling reason to accept that the link between mind and world is as Kant asks us to suppose it to be.

The question concerning the objective, ontological status of the intelligibility of the world seems to ultimately hang on the nature of mathematical objects. For, what is ultimately meant by an object of intelligibility? A mathematical object? Plato and Nietzsche both recognized that this question boils down to the objective status of "the one", insofar as *logos* is that very capacity to gather many disparate elements into one coherent form, pattern, or rational principle. The question is whether the world is divisible in this manner or not. Plato, of course, argued it was via the forms; Nietzsche argued it was not and that such apparent intelligibility was nothing more than the schematism imposed upon the world by the subject's will to power. Kant attempted to offer a kind of skeptical alternative that both excluded metaphysical speculation but kept the science and mathematics

of his day. However, we have seen that such an understanding fails based upon recent developments in mathematics. Given Kant's failure to adequately account for mathematical "knowledge", if one wishes to keep Kant's critique of reason wholesale, it becomes difficult to see how Nietzsche's radical destruction of reason does not become the only option:

[u]ltimately, human beings find in things nothing but what they themselves have imported into them: the finding is called science... [and thus in] *summa*, science is preparing a sovereign ignorance, a feeling that there is no such thing as "knowing," that it was a kind of arrogance to dream of it, more, that we no longer have the least notion that warrants our considering "knowledge" even a possibility – that "knowing" itself is a contradictory idea (WP 606, 608)³⁰.

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It is worth noting that the modern idea that there lies something more fundamental than reason that can assail the claims of logic and mathematics arises first in Descartes' evil demon thought experiment. Indeed, Descartes argues that it is precisely power that could undermine the truths of arithmetic. The kind of power that could pull this off, according to Descartes, would be omnipotence. But it is worth considering, in the light of such subsequent deconstructions as those offered by Foucault, Derrida, and Butler, for example, whether Descartes might be more amenable than we tend to imagine to the idea that the "dream world" and other "snares for our credulity" are manufactured by invisible, pervasive systems and structures of power. Either way, the only thing that can save Descartes from the disorienting threat of such a radical skepticism, a skepticism borne of destabilizing abuses of power in institutions and ideologies, is burrowing into his own subjectivity. It is in this sense, then, that, as we noted earlier, Heidegger saw that the true origin of Nietzschean will to power was not Kantianism but Cartesianism, in particular, Descartes' grounding of "being" and "truth" in the human subject and its dependence on God as the epistemological guarantor of veracity. And once God "dies" via the advent of modern science and technology, there remains only will to power to account for the intelligibility of the world.

Yet, as we argue, Descartes runs up against the very same problems as Kant and Nietzsche and all who attempt to argue for something more fundamental than rationality, namely, the problem of self-referential incoherence. In reasoning that he could possibly be deceived about the truths of arithmetic, Descartes' argument assumes and relies on the very kind of reasoning it attempts to question. If the

³⁰ F. Nietzsche, *The Will to Power*, para. 606, 608.

truths of arithmetic are dubitable but nevertheless intelligible, then such a doubting of them must doubt intelligibility itself. Moreover, if arithmetical reasoning is intelligible but dubitable, and power is the grounds of its dubitability, then Descartes cannot rely on argument to overcome solipsism and infer the existence of a benevolent power that secures the veracity of reason, as doing so is a self-referential absurdity. As Thomas Nagel writes concerning this very doubt of Descartes: “it is not possible to argue in this way, because it is an instance of the sort of argument it purports to undermine”³¹. In other words, Descartes’ argument involves some form of reasoning and cannot help but do so, insofar as it is a form of doubt.

Postmodernism is wholly driven by its anti-victimization ethics, which justifies its radical critique of metaphysics and rationality. However, given our critique, Kant’s philosophy of mathematics, both in itself and as putative support for postmodern critiques of reason, must be abandoned. It appears then that the only “metaphysics” remaining that could sustain postmodernism is, in fact, Nietzsche’s, namely an “anti-metaphysics,” which includes a wholesale critique of rationality and admits of only power and power relations. Yet, Nietzscheanism can provide absolutely no justification for postmodernism’s ethic. Indeed, according to Nietzsche, if intelligible structures must be abandoned, then reality is best understood in terms of power relations, and there remains absolutely no reason to side with the weak, save for 2000 years of catechesis in Judeo-Christianity. Why not side with the strong instead? The inability to answer this question without recourse to Judeo-Christian/Platonic metaphysics – Christianity, for Nietzsche, is merely “Platonism for the people” – permits Nietzsche to advocate for a philosophy of strength over weakness. For example, in a passage that perhaps best summarizes his entire philosophy, Nietzsche writes that “the weak and the ill-constituted should die off, and we shall help them to do so: first principle of *our* philanthropy. And one shall help them to do so”³².

Without recourse to truth and metaphysics, ethical claims of preference for victims, the oppressed, and the marginalized remain unjustified, indeed arbitrary. Postmodernism’s ethic requires justification, which, it seems, only traditional metaphysics – the very thing that postmodernism rejects on the supposition of its own ethics – can give.

³¹ T. Nagel, *The Last Word*, Oxford: Oxford University Press 1997, p. 62.

³² F. Nietzsche, *The Twilight of the Idols and The Anti-Christ*, New York, NY: Penguin Classics 1968, p. 128.

We have argued that postmodernism, if it wishes to preserve some connection to the sciences, is contingent upon Kant's philosophy of mathematics. However, as we have argued, Kant's philosophy of mathematics is wholly untenable. Recourse therefore must be made to Nietzscheanism as the only viable alternative, should postmodernism wish to keep its critique of reason. Yet Nietzscheanism wholly destroys postmodernism's motivation for ever embarking on its critique of reason, insofar as Nietzsche demonstrates that ethical critiques of oppression, or any ethics for that matter, are entirely unjustifiable – indeed, unsustainable. For Kant, it was his unique theory of mathematics that enabled him to both preserve and critique (delimit) reason. Kant did not dispense with mathematical truth, but rather showed how such truth was wholly contingent upon the subject's construction in intuition (thereby, Kant thought, saving mathematics from the Humean critique). But it is precisely this Kantian legacy in mathematics, insofar as it justifies Kant's Copernican turn, that enables further, devastating critiques of rationality to be launched by later thinkers. As Kant's philosophy of mathematics is no longer tenable, and thus neither are the grounds for his Copernican revolution, the framework for postmodernism's critique of reason falls apart, unless one wishes to slide along with Nietzsche into an irrational and absolute destruction of reason, in which case no support for postmodernism's anti-victimization ethics is available. This is what's really wrong with postmodernism.

In conclusion, our critique of postmodernism not only exposes the philosophical incoherence of reducing intelligibility to subjective construction but also gestures towards its theological significance. If intelligibility is real ontological status irreducible to human cognition, then such a status and irreducibility cry out for an explanation, that is, an explanatory ground beyond human cognition, namely a transcendent or divine intellect. The affirmation of the ontological reality of intelligibility thus entails a theistic metaphysics: *logos* then would not merely be a human ordering principle but the eternal Intelligibility or Word through which, through whom, all things are made intelligible. The rejection of this truth, as postmodernism shows, leads not to liberation but to incoherence and nihilism; its recovery restores both philosophy's and theology's shared ground in reality and reason, wholly compatible and even harmonious with revelation.

Bibliography

1. Ardeshir M., *Kant's Influence on Brouwer*, "Wisdom and Philosophy" 1 (1) 2005.
2. Arendt H., *The Human Condition*, Chicago, IL: University of Chicago Press 1958.
3. Armitage D., *Heidegger and the Death of God*, New York: Palgrave Pivot 2016.
4. Armitage D., *Philosophy's Violent Sacred*, East Lansing, MI: Michigan State University Press, 2021.
5. Badiou A., *Being and Event*, New York: Bloomsbury 2013. Butler C., *Postmodernism: A Very Short Introduction*, Oxford: Oxford University Press 2002.
6. Butler J., *Gender Trouble*, New York, NY: Routledge Classics 2006.
7. Clarke-Doane J., *Morality and Mathematics*, Oxford: Oxford University Press 2020.
8. Derrida J., *Writing and Difference*, Chicago IL: University of Chicago Press 1978.
9. *Existentialism: Basic Writings*, ed. C. Guignon, D. Pereboom, Indianapolis, IN: Hackett Publishing 2001).
10. Foucault M., *The History of Sexuality: An Introduction*, vol. 1, New York, NY: Vintage Books 1990, pp. 81-91.
11. Gödel K., *What is Cantor's Continuum Problem?*, in: *Kurt Gödel: Collected Works*, vol. II, pp. 254-270.
12. Heidegger M., *Basic Writings*, San Francisco: Harper San Francisco 1993.
13. Heidegger M., *Contributions to Philosophy: On the Event*, Bloomington: Indiana University Press 2012.
14. Heidegger M., *Kant and the Problem of Metaphysics*, Bloomington: Indiana University Press 1997.
15. Heidegger M., *Nietzsche. Volume IV: Nihilism*, New York, NY: Harper and Row 1982.
16. Heidegger M., *The Question Concerning Technology and Other Essays*, New York, NY: Harper and Row 1997.
17. Hicks S., *Explaining Postmodernism*, Roscoe, IL: Ockham's Razor Publishing 2011.
18. Hoffman D., *The Case Against Reality*, New York, NY: W.W. Norton and Company 2019.
19. Janicaud D., *Heidegger in France*, Bloomington: Indiana University Press, 2015.
20. Kant I., *The Critique of Pure Reason*, trans. N. Kemp Smith, New York, NY: Palgrave Macmillan 2003.
21. Kelly S., *Understanding Postmodernism*, Downers Grove: InterVarsity Press 2007.
22. Lawler P.A., *Postmodernism Rightly Understood: A Return to Realism in American Thought*, Washington D.C.: Roman & Littlefield 1999.
23. Nagel T., *The Last Word*, Oxford: Oxford University Press 1997.
24. Nietzsche F., *Human All Too Human*, Lincoln NE: University of Nebraska Press 1986.

25. Nietzsche F., *The Twilight of the Idols and The Anti-Christ*, New York, NY: Penguin Classics 1968.
26. Nietzsche F., *The Will to Power*, New York, NY: Vintage Press 1968.
27. Nietzsche F., *Thus Spoke Zarathustra*, trans. W. Kaufmann, New York, NY: Modern Library 1995.
28. Raatikainen P., *Conceptions of truth in Intuitionism*, "History and Philosophy of Logic" 25 (2) (2004), pp. 131-145.
29. Raatikainen P., *On the Philosophical Relevance of Gödel's Incompleteness Theorems*, "Revue Internationale de Philosophie" 59 (4) (2005).
30. Sallis J., *Kant and the Spirit of Critique*, Bloomington: Indiana University Press 2020.
31. Tieszen R., *After Gödel*, Oxford: Oxford University Press 2011.
32. Witt C., *Philosophical Topics*, "Anti-Essentialism in Feminist Theory" 23 (2) (1995), pp. 321-344.