Back to the Great Outdoors?
A Kantian Reply to Meillassoux’s Argument

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ABSTRACT

In this thesis I develop both immanent and extrinsic critiques of Meillassoux’s argument, principally as it is developed and articulated in his book *After Finitude*. Meillassoux’s ambitious project is assessed in detail. While I concede that the anti-realism developed in the shadow of Kant’s legacy has produced a profound rift between philosophical and scientific discourse, I contend that Meillassoux’s argument tacitly conflates epistemology with ontology. Most pressing, however, is that his central argument is predicated on a misreading of Kant’s idealism. I defend the epistemological interpretation of Kant’s idealism over the traditional metaphysical reading, and argue that Kant’s transcendental idealism and his empirical realism not only accommodates the ‘literal’ truth of ancestral claims but also demonstrates that what counts as real depends on an intuitive-epistemic framework: a standpoint. Moreover, I demonstrate that Meillassoux’s argument is predicated on, and permeated by, what Kant refers to as transcendental error, the upshot of which is a tacit adherence to dogmatism and the generation of antinomies.
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AUTHOR’S DECLARATION

I declare that the research contained in this thesis, unless otherwise formally indicated within the text, is the original work of the author. The thesis has not been previously submitted to this or any other university for a degree, and does not incorporate any material already submitted for a degree.

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INTRODUCTION:
A KANTIAN REPLY TO MEILLASSOUX’S ARGUMENT

Metaphysics means nothing but an unusually obstinate effort to think clearly.¹

A slight change in the meaning of terms has caused all this commotion.²

Flammarion engraving, Paris 1888.

It is not difficult to see why Quentin Meillassoux’s After Finitude ‘provoked a genuine thunderstorm in the philosophical sky’.³ His ambitious crusade against what he takes to be the anti-realism stitched deep into the metaphysical backdrop of contemporary philosophy begins with a seductive philosophical provocation: if we cannot know reality as it exists independent of our minds, how do we explain the fact that we do?⁴ The interest in Meillassoux’s argument lies in both his diagnosis of this question, and in the striking originality of his approach to its resolution. He contends that although Kant’s idealist revolution laid the groundwork for a fundamental rift between the predominant position in philosophy – correlationism – and the clear success of science in grasping things as they are in themselves, this rift cannot be overcome by a simple rejection of the former. Instead, correlationism must be refuted by immanent critique; by accepting and clarifying its argumentative procedures and demonstrating that they lead to contradiction. To borrow a line Slavoj Žižek borrows from Richard Wagner’s

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³ Catherine Malabou, ‘Can We Relinquish the Transcendental?’ The Journal of Speculative Philosophy 28, no. 3 (2014), 242.
⁴ The ambiguities in this question are a central feature of this thesis. Although this anti-realist stance is especially characteristic of philosophers working within the so-called continental tradition – typically associated with phenomenological, postmodernist and hermeneutical approaches – because it emerges from the critique of traditional metaphysics and hence of metaphysical realism it is a fairly common current in the so-called analytic tradition. Thinkers as different as Carnap, Heidegger, Wittgenstein, Derrida, Rorty and Putnam argue for the elimination, rejection or deconstruction of metaphysical realism.
“Parsifal” – “The [correlationist] wound is healed only by the spear that smote” it. This ‘critique of Critique’ serves as a proof of Meillassoux’s contention that the only non-dogmatic means by which to account for our capacity to know things in themselves is to transform the sceptical principle grounding the correlationist critique of metaphysics into a necessary truth about the universe, and the possibilities and actualities therein; namely, the necessity of everything’s contingency. Rendered ontological this is to say that reality is a ‘hyper-Chaos’ in which anything at all (except a contradictory entity or the existence of nothing) is possible. In his preface to After Finitude Alain Badiou conveys the courageous novelty of Meillassoux’s argument: ‘Quentin Meillassoux has opened up a new path in the history of philosophy …; a path that circumvents Kant’s canonical distinction between “dogmatism”, “skepticism” and “critique”.’ In 140 pages of typically clear and concise argument Meillassoux attempts to overturn Kantian finitude and reconcile thought and being by demonstrating the necessity of everything’s contingency, while also studiously avoiding either naïve realism or dogmatic idealism. This is why Meillassoux’s ‘thunderbolt’ has generated considerable interest and why his argument calls for serious consideration.

My critique of Meillassoux’s argument is developed along both immanent and extrinsic lines. I assess his chain of reasoning by means of explication and critique, analysing its details and the interpretations of the historical arguments upon which it is based. Accordingly, my critique ranges widely across the history of Western philosophy. I argue that despite their robust appearance Meillassoux’s central arguments fail to convince. At the heart of my critique, however, is the contention that his project is predicated on a fundamental misunderstanding of Kant’s transcendental idealism, and that it consists, therefore, in an effort to burn down a straw man. Indeed, I demonstrate that his failure to engage robustly with Kant’s Critique is evident throughout. I draw on and defend Henry Allison’s groundbreaking epistemological interpretation of Kant’s idealism to argue that Meillassoux has not only misunderstood Kant’s correlationism, but also that it provides a critical perspective through which to identify both

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7 Ibid.
Meillassoux’s central error – a conflation of epistemology with ontology – and the latent dogmatism at the heart of his argument.

Through the lens of an epistemological interpretation of Kant’s idealism, I defend his transcendental idealism and empirical realism. *Pace* Meillassoux, I contend that we cannot know things in themselves because such knowledge entails the illicit extension of categorial cognition beyond its legitimate field of application, i.e., sensible intuition. The distinction between appearances and things in themselves is not an ontological distinction relating to two spheres of reality, the latter being more fundamental than the former; it is a transcendental distinction between two logically correlated epistemic-intuitive standpoints. On this view, appearances concern objects considered in relation to the *a priori* conditions of discursive cognition, and things in themselves refers to objects considered in relation to categorial cognition but in abstraction from the conditions of sensible intuition. The transcendental model, or epistemic-intuitive framework, of such cognition is that of a purely intellectual intuition. Thus knowledge of objects considered as things in themselves is knowledge of objects from the Gods-eye view; from the standpoint of a rational being whose categorial cognition of things is unrestricted and immediate, since it produces the universe and its furniture directly from its mind. From this perspective our empirical reality refers to objects in relation to the *a priori* framework of our possible cognition. Insofar as we can make any sense of it, knowledge of “super-sensible reality” refers to the standpoint of a purely intuitive intellect. I contend that Meillassoux’s argument is premised on the mistaken assumption that knowledge of things in themselves – of the ‘Great Outdoors’ – pertains to that which is “really real” as opposed to that which is merely “for us”. In contrast, I argue that, for Kant, empirical reality is real; it is of no lesser or greater reality than non-empirical reality, whatever that might be. I deploy Kant’s analysis of transcendental error and transcendental illusion to show that the argument by which Meillassoux attempts to establish a non-metaphysical absolute conforms very closely to the procedure that Kant identifies as germane to dogmatic metaphysics and the generation of antinomies.

In short, I defend Kant’s correlationism and refute Meillassoux’s speculative materialism.
As the following chapters contain introductory sections I will here provide only a short précis of each by way of outlining my overall argument. The first chapter introduces and contextualises Meillassoux’s conception of correlationism and focuses on its purported conflict with so-called ancestral statements. Through an engagement with critical commentary I clarify what is at stake in that conflict. I introduce Kant’s idealism and his conception of scientific investigation into nature to argue that neither ancestral time nor the posterior time of thought’s extinction constitute a fundamental challenge to Kant’s correlationism. The second turns to the groundwork of Meillassoux’s approach to establishing the possibility of an absolute that might vindicate the ‘literal meaning’ of ancestral statements. Meillassoux adopts the form of Descartes’ argument in *Meditations* alongside Kant’s critique of the ontological argument to clarify the procedure by which he means to determine a non-dogmatic primary absolute that might underwrite the absolute scope of mathematics. His critique of the principle of reason (PSR) in relation to the ontological argument informs my defence of Kant’s restricted version of the PSR – causal law. This sets the stage for Meillassoux’s immanent critique of correlationism. That done, I return to Meillassoux’s conception of correlationism and the argument with which he attempts to refute Kant’s ‘weak’ correlationism and defend ‘strong’ correlationism. The central argument of correlationism – the correlationist circle – is rejected and the epistemological reading of Kant’s idealism is introduced. I defend this interpretation against the traditional metaphysical interpretation and demonstrate that it provides the means by which to dissolve the *prima facie* inconsistencies in Kant’s claims about things in themselves. Having developed and defended the interpretation of Kant’s correlationism upon which my critique of Meillassoux’s argument is based, in chapter four I turn to its centrepiece: the attempt to establish knowledge of a primary absolute, and thereby breach the correlationist circle, through a confrontation between strong correlationism and absolute idealism. I draw on Giraud’s and Millière’s critique to demonstrate that Meillassoux’s deduction fails. I then demonstrate in chapter five that, despite its considerable difficulties, the argument of Kant’s Transcendental Deduction in fact succeeds: it proves both that we must apply the categories to sensible intuition and that the categories must themselves apply to objects in a spatiotemporal manifold. Meillassoux’s contention, then – that Kant is incapable of proving the ‘absolute’ necessity of the categories (i.e., with respect to being as such) because

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9 In what follows I use the terms ‘Transcendental Deduction’ or ‘Deduction’ to refer to the actual texts of Kant’s arguments in the *Critique* and ‘transcendental deduction’ or ‘deduction’ to refer its argument.
he merely describes them – is, I argue, predicated on a fundamental misunderstanding of the argument of the Deduction. As Meillassoux’s critique of Kant’s deduction features prominently in his speculative reply to Hume’s problem of induction, this misunderstanding is the central component of my assessment of his refutation of causal necessity developed in the final chapter. There I criticise Meillassoux’s account of both Hume’s and Kant’s responses to the problem of induction, and his contention that their arguments rely on both probabilistic reasoning and the assumption that what is possible can be totalised. This underpins my contention that Meillassoux’s speculative solution to Hume’s problem, by way of Cantor’s theory of infinities, is a reply to a question that does not stand in need of an answer. I conclude by defending Kant’s empirical realism and transcendental idealism, contending that Meillassoux’s argument and his putatively non-metaphysical absolute rely on the very dogmatism he repudiates.
CHAPTER ONE:
CORRELATIONISM AND THE CHALLENGE OF THE ANCESTRAL

[We can only hope that the problem of ancestral slumber, by enjoining us to reconcile thought and absolute.]

Introduction

According to Quentin Meillassoux, ‘contemporary philosophers have lost the great outdoors, the absolute outside of pre-critical thinkers’. The loss of the great outdoors, of our ‘grasp [of] the in-itself’ or knowledge of ‘what is whether we are or not’, is the result of what he terms ‘the Kantian catastrophe’ or Kant’s ‘Ptolemaic counter-revolution in philosophy’. He argues that by making all actual and possible human knowledge and experience relative to human beings’ intuitive and rational capacities, Kant’s critical revolution catastrophically undermined the possibility of knowing things as they are in themselves, which is to say, as they are independently of our modes of cognition and experience.

In After Finitude, then, Meillassoux’s goal is to overcome Kantian finitude and establish knowledge of the universe as it is in itself. However, the strategy by which Meillassoux ‘takes up the injunction to know the absolute, and break with the transcendental tradition that rules out its possibility’ is prima facie paradoxical because it is predicated on accepting what he takes to be the central premise underpinning Kant’s proscription of knowing the in-itself. Indeed, Meillassoux is clear that Kant’s revolution decisively rules out pre-critical philosophy. ‘[We cannot be the heirs of Kantianism’, explains Meillassoux, because we ‘cannot go back to metaphysics, just as we cannot go back to being dogmatists’. In other words, Meillassoux accepts that Kant’s transcendental idealism inaugurates the basic philosophical framework.

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11 Ibid., 7.
12 Ibid., 125, 27, 118. The charge that Kant’s philosophy is anti-Copernican or Ptolemaic is far from new. Norman Kemp Smith (2003, 23) describes Kant’s philosophy as a ‘Ptolemaic anthropocentric metaphysic’; Bertrand Russell (1992, 9) claims that it would be ‘more accurate if [Kant] had spoken of a “Ptolemaic counter-revolution”’; and J. J. C. Smart (1963, 151) concludes that ‘Kant’s so-called Copernican revolution was really an anti-Copernican counter-revolution.’
13 AF, 7.
14 Ibid., 29.
within which the key philosophical developments since Kant (including those characteristic of the contemporary philosophical landscape) remain situated. In this respect, Meillassoux agrees with Slavoj Žižek that ‘philosophy as such is Kantian’ and ‘should be read from the vantage point of the Kantian revolution’. The upshot is that Meillassoux’s route to the great outdoors, to acquiring knowledge of things as they are in themselves, proceeds immanently: by first accepting and then working through what he takes to be the basic coordinates of Kant’s idealism. In so doing, he recasts Kant’s critical revolution as inaugurating a correlationist revolution in philosophy. Despite its various articulations, correlationism’s central thesis is broadly Kantian: we can have no knowledge of things in themselves because all that we can know is correlated with, relative to, or simply “for” us.

In *After Finitude* Meillassoux’s opening gambit sets the correlationist prohibition on knowing things in themselves against what he claims is the only coherent way to understand certain propositions generated by the empirical sciences that pertain to events that occurred prior to the emergence of the material conditions required for the existence of sentient life. He argues that these ‘ancestral statements’ cannot be incorporated into the correlationist worldview (according to which all knowledge is a correlate of our conceptual frameworks) precisely because they refer to events that occurred prior to the conditions required for the instantiation of any conceptual framework. So Meillassoux’s argument begins with the following antinomy: on the one hand ancestral statements can be coherently understood only as claims about things as they are in themselves; on the other hand, according to correlationism, ancestral statements cannot be taken that way because knowledge of things as they are in themselves is impossible. Meillassoux’s argument consists largely in an effort to resolve this antinomy by demonstrating that correlationism is false.

This chapter concerns the nature of this antinomy between correlationism and ancestral claims. Following an introduction to Meillassoux’s characterisation of correlationism, I turn to the challenge of the ancestral; to an analysis of exactly how and why, according to Meillassoux, ancestral claims are incompatible with correlationism. In so doing, I draw on critical commentary to clarify the nature of this challenge and interrogate its presuppositions. An examination of Peter Hallward’s incisive criticisms of Meillassoux’s characterisations of

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correlationism and ancestral statements, and their purported incompatibility, sets the stage for a deeper assessment of the challenge posed by ancestral statements. Hallward raises three important issues: 1) that Meillassoux’s characterisation of correlationism equivocates between epistemology and ontology; 2) that ancestral claims are not at all problematic for correlationist philosophers because, following Kant, past events (however remote) are understood in accordance with the conditions of our knowing; and 3) that there is anyway simply no way to overcome correlationism because to do so would mean knowing things independently of our modes of cognition. Although the defence of Kant’s transcendental idealism I develop here demonstrates that Hallward’s criticisms are basically correct, his treatment is, nonetheless, based on only a superficial engagement with Meillassoux’s account of the challenge posed by ancestral claims. I argue that Hallward has misrepresented Meillassoux’s argument in two ways. First, he has failed to recognise that post-Kantian philosophy has indeed drawn ontological conclusions from Kant’s transcendental theory of experience. Following an analysis of the relationship between Kant’s claim that ‘the proud name of ontology … must give way to the modest one of a mere analytic of the pure understanding’ and the rudiments of his theory of appearances, I demonstrate that phenomenological ontology, particularly as espoused by Heidegger, advances the ontological thesis that being is being “for us”. Second, I argue that Nathan Brown is right to insist that Hallward has misrepresented Meillassoux’s argument because he has not really grasped why Meillassoux thinks ancestral statements are categorically different from statements about unobserved events or those that occurred in the less remote past. Meillassoux’s point, argues Brown, is that unlike events that took place in a less remote past (whether perceived or not), ancestral events cannot be incorporated into a correlationist framework because, Meillassoux claims, the time in which they occurred is logically anterior to the emergence of correlational time. I then draw on Ray Brassier’s elucidation of Meillassoux’s argument to reinforce Brown’s interpretation and his reply to Hallward. I also follow Brassier’s critique of Meillassoux’s distinction between ancestral time and correlational time to argue that Meillassoux does not in fact demonstrate that ancestral time is a logical condition of possibility for correlational time; and that, moreover, insofar as ancestral time is framed in familiar spatiotemporal terms, ancestral statements can be understood as correlated with our

16 Immanuel Kant, *The Critique of Pure Reason*, eds. and trans. Paul Guyer and Allen W. Wood (New York: Cambridge University Press, 2005), A247/B303, 358. Hereafter abbreviated as CPR. Quotations from Kant’s *Critique* follow the convention of referring to locations in both first (A) and second (B) editions, where appropriate. Kant’s emphases in the passages I quote from the *Critique* are in bold font – as they appear in Guyer’s and Wood’s 2005 Cambridge edition.
spatiotemporal framework. After introducing and assessing Brassier’s alternative approach to identifying a non-correlational or absolute time in the end of time and thought entailed by the entropic heat death of the universe, I argue that neither anteriority nor posteriority of thought are incompatible with Kant’s transcendental idealism because it accommodates the extension of our knowledge far beyond what is directly available to sensation. Thus, I conclude that neither Meillassoux’s nor Brassier’s efforts to identify a non-correlational time undermine Kant’s correlationism.

Correlationism and the Challenge of the Ancestral: An Introduction

I begin with a preliminary account of correlationism, according to Meillassoux, through a brief analysis of two of his clearest characterisations of its central features. The first is taken from his 2008 lecture, ‘Time Without Becoming’, in which he describes correlationism as ‘the contemporary opponent of any realism’ and explains that

Correlationism takes many contemporary forms, but particularly those of transcendental philosophy, the varieties of phenomenology, and post-modernism. But although these currents are all extraordinarily varied in themselves, they all share, according to me, a more or less explicit decision: that there are no objects, no events, no laws, no beings which are not always-already correlated with a point of view, with a subjective access. Anyone maintaining the contrary, i.e. that it is possible to attain something like a reality in itself, existing absolutely independently of his viewpoint, or his categories, or his epoch, or his culture, or his language, etc.- this person would be exemplarily naïve, or if you prefer: a realist, a metaphysician, a quaintly dogmatic philosopher.17

In addition to identifying some of the contemporary forms of correlationism, this characterisation underlines its basic epistemological implications. According to Meillassoux, all correlationist perspectives hold that any knowledge we have or could have is relative to, or correlated with, us in some respect. If we take the notion of ‘reality in itself’ to refer to that which exists independently of any correlation with us, then it follows, says Meillassoux, that the belief in the possibility of attaining knowledge of reality in itself is naïve. Following the characterisation above, he deploys a standard sceptical argument to explain why such a belief is indeed naïve: ‘We can’t know what reality is in itself because we can’t distinguish between

those properties which are supposed to belong to the object, and those properties belonging to the subjective access to the object.) He argues, moreover, that any attempt even to think reality in itself generates a contradiction because, he says, even the thought of reality in itself is always correlated with us. Thus, for Meillassoux, we cannot think an object outside of thought without in so doing turning it into a thought. And although it should be noted here, and kept in mind throughout, that correlationism is principally an epistemological thesis about the limits of possible knowledge, the characterisation in the quotation above is subtly suggestive of the ontological import of correlationism. Meillassoux’s claim, that in the correlationist framework ‘there are no objects, no events, no laws, no beings which are not always-already correlated with a point of view, with a subjective access’ implies that all objects, events, laws and beings are always (even necessarily) correlated with us and that in our absence there would be no events, laws or beings. This striking implication is not the result of any imprecision in Meillassoux’s argument. Indeed, as I shall discuss in more detail shortly, Meillassoux claims that ‘for the correlationist, the sentence: “X is” means “X is the correlate of thinking”’. That is to say, for the correlationist, that which exists is always a correlate of thought. This conclusion is put succinctly when Meillassoux claims that ‘the ontological requisite of the moderns … [is that] to be is to be a correlate.’ I turn to Meillassoux’s characterisation of the ontological import of correlationism in the next section.

Insofar as the correlationist outlook proscribes knowledge of the world as it is in itself and is, therefore, ‘the contemporary opponent of any realism’, it can be broadly characterised as idealism. Indeed, Meillassoux explicitly states that he deploys the term “correlationism” to

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18 Ibid., 3. Berkeley deploys exactly this argument in *Three Dialogues*. In his reply to Hylas, Philonous says:

> It is your opinion the ideas we perceive by our senses are not real things, but images, or copies of them. Our knowledge therefore is no farther real, than as our ideas are the true representations of those originals. But as these supposed originals are in themselves unknown, it is impossible to know how far our ideas resemble them; or whether they resemble them at all (1999, 190).

19 Meillassoux refers to this argument as ‘the correlationist circle’. In Chapter 3 I demonstrate that it is predicated on an elementary fallacy.
20 TWB, 2.
21 AF, 28.
22 Of course this is a crude bifurcation, not least because idealism is not necessarily opposed to realism (however naïve) or to knowledge of things in themselves. Indeed, insofar as he thinks that physical reality just is the thoughts in God’s mind, and that our experience provides direct access to these thoughts, even the arch-idealist Berkeley can be viewed as a realist. See Gene Callahan (2015) for an account of why Berkeley should be understood as a realist – albeit an idealist one – and how his argument wrongly became a byword for anti-realism and subjectivism.
recast the traditional debate between idealism and realism. In a revealing response to a question following a paper he delivered at Goldsmiths’ College, Meillassoux explains that the virtue of the term “correlationism”, as opposed to “idealism”, is that it helps him ‘avoid the usual “parade” of transcendental philosophy and phenomenology against the accusation of idealism’. He continues: ‘I mean answers such as this: “Kantian criticism is not a subjective idealism since there is a refutation of idealism in the Critique of Pure Reason”; or “phenomenology is not a dogmatic idealism, since intentionality is orientated towards a radical exteriority, and it is not a solipsism since the givenness of the object implies, according to Husserl, the reference to an intersubjective community”’.23 Rather than directly engaging with the ways in which, for example, phenomenology and transcendental idealism would repudiate the charge of idealism, Meillassoux’s approach is to claim that insofar as these philosophies have a correlationist character, they cannot avoid the idealist conclusion that the in-itself is either unknowable, or both unknowable and meaningless.

In order better to understand this claim, let us now turn to another characterisation of correlationism from the beginning of After Finitude.

The central notion of modern philosophy since Kant seems to be that of correlation. By ‘correlation’ we mean the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other. We will henceforth call correlationism any current of thought which maintains the unsurpassable character of the correlation so defined. Consequently, it becomes possible to say that every philosophy which disavows naïve realism has become a variant of correlationism.24

This characterisation of correlationism shares a number of features with the characterisation above. Here, Meillassoux again pits correlationism against (naïve) realism and claims that for correlationism knowledge of the world as it is in itself, which is to say, not as it is correlated with us, is impossible: being cannot be considered apart from thought. But the characterisation of correlationism here emphasises that the same relation holds in reverse: just as being cannot be considered apart from thought, so too thought cannot be considered apart from being. However, the claim ‘that we can never grasp a subject that would not always-already be related

24 AF, 5.
to an object’ requires some clarification, not least because Kant – the wellspring of correlationism according to Meillassoux – holds that thought can indeed be considered apart from being.\textsuperscript{25} In the \textit{Critique of Pure Reason} Kant’s deduction of the pure categories of the understanding (especially, in what is now known as the Metaphysical Deduction) and his account of the formal activity of reason (in the Transcendental Dialectic) clearly demonstrate that he is explicitly concerned with determining the nature and epistemic capacities of the human mind \textit{qua} human mind, which is to say, as it is independently of being, or as it is not ‘related to an object’.\textsuperscript{26} Nevertheless, and as I will demonstrate in detail in Chapter 3, it is also clear that for Kant our knowledge and experience of objects in the world requires sensory material or sense-data from empirical reality even though the nature of those sensations is indeed correlated with our epistemic and intuitive capacities.\textsuperscript{27} Qualified in this way, Kant’s thought sits somewhat more comfortably within the correlationist framework as defined by Meillassoux: for Kant, our \textit{knowledge} of the world cannot be considered apart from the world, just as the world that we do know cannot be known apart from our thought. But this concession prompts us to register that Kant thinks we can in fact \textit{consider}, if not \textit{know}, objects as they are apart from both thought and sensation, or as they are in themselves. Indeed, it is interesting to note that the term “correlate” (\textit{korrelatum}) first appears in the \textit{Critique} at the end of the first section of The Transcendental Aesthetic, in which Kant explains that the ‘true correlate’ (\textit{wahres Korrelatum}) of ‘outer objects’, ‘i.e., the thing in itself’, ‘cannot be cognised through representations’ and ‘is also never asked after in experience’.\textsuperscript{28} I assess in Chapter 3 Meillassoux’s argument that Kant’s claims about things in themselves render his correlationism inconsistent or “weak”, and so less rigorous that those post-Kantian correlationist philosophies that more robustly rule out not only knowledge, but also thought, of things in themselves.\textsuperscript{29}

\textsuperscript{25} Ibid.

\textsuperscript{26} The Metaphysical Deduction of the pure categories of the understanding is contained in the \textit{Critique’s} section On the Clue to the Discovery of all Pure Concepts of the Understanding (\textit{A67/B92–A83/B109, 204–214}). Although the concepts of the pure understanding are transcendental, having to do with possible objects of experience, they derive from formal, logical functions. In the introduction to the Transcendental Dialectic, Kant discusses reason in general and sets out its ‘merely formal, i.e., logical use’ (\textit{A299/B355, 387}). The introduction to the Transcendental Dialectic runs from \textit{A293/B249 – A309/B366, 384–393}.

\textsuperscript{27} Indeed, that thesis just is Kant’s Copernican revolution.

\textsuperscript{28} \textit{CPR}, A30/B45, 162.

\textsuperscript{29} Meillassoux argues that Kant simply contradicts the central tenet of correlationism when he claims that things in themselves can be thought and insofar as they can be thought they can be considered to exist, to ground appearances and to be non-spatiotemporal. As we shall see, Meillassoux contrasts Kant’s approach with the strong model of correlationism according to which we can neither think things in themselves nor produce
Meillassoux contends that the correlationist view that thought and being are inextricably linked (so that neither can be considered without the other) is clearly expressed in post-Kantian developments that come increasingly to focus on the ‘primacy of the relation [between, for example, being and thinking] over the related terms’. By way of an example, Meillassoux quotes from Huneman’s and Kulich’s introductory text to phenomenology, in which they write that

it would be naïve to think of the subject and the object as two separately subsisting entities whose relation is only subsequently added to them. On the contrary, the relation is in some sense primary: the world is only world insofar as it appears to me as world, and the self is only self insofar as it is face to face with the world, that for whom the world discloses itself.31

On this account, thought and being, or self and world, are two sides of one correlate, neither side of which would be meaningful without the other.32 In other words, both world and self are co-constituted: the world is the world insofar as it appears for the self (and, therefore, as relative to us in some way) and the self is the self insofar as it has experience of the world. According to Meillassoux, this emphasis on the “co-” (of co-givenness, of co-relation, of the co-originary, of co-presence etc.) is the grammatical participle that dominates modern philosophy; and therefore ‘what divides rival philosophers’ today is competing accounts of ‘the more originary correlation’.33 Who, asks Meillassoux rhetorically, gets it right? Is it ‘the thinker of the subject-object correlation, the noetico-noematic correlation, or the language-referent correlation?’34

determinations about them. I address this contrast in Chapter 3 and argue that it is based on an assumptive and problematic reading of Kant’s transcendental distinction between appearances and things in themselves.

30 AF, 6.
31 Ibid., 5; Philippe Huneman and Estelle Kulich, Introduction a La Phénoménologie (Paris: Armand Colin, 1997), 22. As we shall see, this phenomenological articulation of correlationism gets closer to the strong model of correlationism to which Meillassoux subscribes before developing his own speculative materialist position.
32 The articulation of strong correlationism in Heidegger’s phenomenological ontology to which I turn in the second section of this chapter is consistent with the Huneman’s and Kulich’s account.
33 AF, 5.
34 Ibid. Husserl introduces the terms noesis and noema in Ideas I (2012, 182). Noesis is the intentional process of consciousness. Its noema is the phenomenon or appearance understood as the object as intended. Meillassoux explains that this co-constitutive model, wherein the terms of the correlate are bound together so that neither makes sense without the other, can be found in ‘the twentieth century[s]… two principle media of the correlation…consciousness and language, the former bearing phenomenology and the latter the various currents of analytic philosophy’ (AF, 6).
This introductory account of the core features of correlationism raises two central questions. The first concerns the meaning and accuracy of Meillassoux’s claim that post-Kantian correlationism holds that being is a correlate of thought, and that in the absence of thought there is no being. That question will be addressed later in this chapter in reply to Peter Hallward’s complaint that Meillassoux equivocates between epistemology and ontology in his treatment of correlationism. It will also come to the fore in Chapter 3 when I draw the distinction between weak and strong varieties of correlationism in more detail. The second issue concerns the more fundamental question of why Meillassoux thinks that correlationism holds that things in themselves are unknowable. Ultimately, Meillassoux’s answer to that question is what he terms “the correlationist circle”. As I have already noted in passing, the correlationist circle entails that any attempt to think an object outside of thought is contradictory, because we cannot but think in thought. The trouble with this argument, however, is that it rests on a simple confusion: the claim that things in themselves are unknowable does not follow from the trivially true claim that we can only think in thought. That issue and its implications for Meillassoux’s argument will also be addressed in Chapter 3, in which I focus on his interpretation and critique of Kant’s correlationism. There I argue that Meillassoux’s critique of Kant’s correlationism (and his defence of post-Kantian “strong” correlationism) is predicated on the specious reasoning characteristic of the correlationist circle, and I defend Kant’s correlationism precisely because it is not premised on the correlationist circle. For now, however, we need to turn our attention to the antinomy that animates Meillassoux’s argument: the challenge of the ancestral.

Meillassoux stages a confrontation between two *prima facie* incompatible results of modern thought: the philosophic claim that knowledge of the world as it is in itself is impossible and scientific claims that pertain to events that occurred prior to the emergence of consciousness. His claim is that however correlationist philosophies are construed, and regardless of the correlated terms (whether thought and being, subject and object, mind and world, language and referent, knower and known) insofar as correlationism entails that knowledge of the world as it is in itself is at best impossible and at worst (also) incoherent, it is strictly incompatible with the meaning of certain ancestral statements that are today generated by the empirical sciences. In short, Meillassoux argues that correlationism must be false if ancestral statements

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35Meillassoux introduces the correlationist circle at AF, 8.
are true, because the latter makes sense only if they are understood as claims about things as they are in themselves.

**The Challenge of The Ancestral**

Meillassoux’s efforts to rouse philosophy from its correlationist slumber emerge from a confrontation between correlationism and what he takes to be clear evidence of our capacity to make coherent and non-trivial claims about things in themselves. According to Meillassoux, scientific statements that provide non-relative dates of profoundly ancient events ought to ‘astonish’ honest modern philosophers because, he claims, ‘the literal’ and ‘deepest’ meaning of these ‘ancestral statements’ is incompatible with correlationist procedures. He argues that when confronted with the ‘literal meaning’ of ancestral statements, correlationism ‘converges’ with absolute idealism ‘and becomes equally extraordinary’. ‘[N]o variety of correlationism’, writes Meillassoux, ‘no matter how vehemently it insists that it should not be confused with subjective idealism à la Berkeley, can admit that [an ancestral] statement’s literal meaning is also its deepest meaning’.

In order to demonstrate that the “literal” and “deepest” meaning of ancestral statements is incompatible with the central tenets of correlationism, Meillassoux begins with a definition of ‘the ancestral’ as ‘any reality anterior to the emergence of the human species’. Ancestral statements include, for example, the dates of ‘the origin of the universe (13.5 billion years ago); the accretion of the Earth (4.56 billion years ago); the origin of life on Earth (3.5 billion years ago), and the origin of humankind (*Homo habilis, 2 million years ago*). He terms the material evidence that underpins the generation of these ancestral statements, ‘arche-fossils’, which, he explains, are

not just materials indicating traces of past life, according to the familiar sense of the term ‘fossil,’ but materials indicating the existence of an ancestral reality or event; one

36 AF, 11, 27, 122.
37 Ibid., 18.
38 Ibid., 122. Meillassoux’s approach to this issue recalls something of Bertrand Russell’s complaint that Kant’s idealism cannot be reconciled with the ‘results from astronomy and geology’ because they demonstrate that the ‘the great processes of nebular and stellar evolution proceed according to laws in which mind plays no part’ (1959, 16).
39 AF, 122
40 Ibid, 9.
that is anterior to terrestrial life. An arche-fossil thus designates the material support on the basis of which the experiments that yield estimates of ancestral phenomena proceed – for example, an isotope whose rate of radioactive decay we know, or the luminous emission of a star that informs us as to the date of its formation.41

Meillassoux accepts that, like all scientific accounts, ancestral statements are revisable, and emerge in relation to particular scientific techniques and paradigms.42 Nonetheless, he stresses that since the advent of non-relative dating techniques, ancestral statements can and are meant to be taken as, however defeasibly, accurate accounts of what in fact occurred and when.43 He argues that when these statements are taken at face value (so that, for example, the Earth really did accrete 4.56 billion years ago) they appear to violate basic correlationist principles of intelligibility because the world (here, the arche-fossils) to which these statements refer cannot be understood as correlated to us. The world to which ancestral statements pertain is the world prior to the emergence of consciousness and hence to any and every appearance, experience or givenness. This is why Meillassoux claims that if we accept that ‘the realist...interpretation harboured the key to the ultimate meaning of these ancestral statements’, we ‘would then be obliged to maintain what can only appear to the post-critical philosopher as a tissue of absurdities’.44 In particular, we would be ‘obliged to maintain’ the perfectly common sense but supposedly philosophically ‘naïve’ notion that ‘being is not co-extensive with its appearance to us’.45

It is for this reason that Meillassoux argues that any relativisation to us of the objective realities to which ancestral statements refer (whether this relativisation is conceived in terms of human cognition, biology, culture, language, discourse, history, power relations or anything else) is

41 Ibid, 10.
42 Ibid., 12.
43 Meillassoux explains the difference between, and shift from, relative to non-relative (or absolute) dating techniques in this way:

[D]ating procedures were called ‘relative’ so long as they pertained to the positions of fossils relative to one another (they were arrived at mainly by studying the relative depths of the geological strata from which the fossils were excavated). Dating became ‘absolute’ with the perfection of techniques (basically in the 1930s) that allowed scientists to determine the actual duration of the measured objects. These techniques generally rely upon the constant rate of disintegration of radioactive nuclei, as well as upon the laws of thermoluminescence – the latter permitting the application of dating techniques to the light emitted by stars (AF, 9).

44 Ibid., 14.
45 Ibid.
fundamentally incompatible with their meaning.\textsuperscript{46} He concedes, nonetheless, that correlationist rejoinders to his view of ancestral statements are apparently possible – if in the end mistaken. Thus, he writes that

doubtless, where science is concerned, philosophers have become modest— and even prudent. Thus, a philosopher will generally begin with an assurance to the effect that his theories in no way interfere with the work of the scientist, and that the manner in which the latter understands her own research is perfectly legitimate. But he will immediately add (or say to himself): legitimate, as far as it goes. What he means is that although it is normal, and even natural, for the scientist to adopt a spontaneously realist attitude, which she shares with the ‘ordinary man’, the philosopher possesses a specific type of knowledge which imposes a correction upon science’s ancestral statements– a correction which seems to be minimal, but which suffices to introduce us to another dimension of thought in its relation to being.\textsuperscript{47}

The minimal correction, says Meillassoux, typically consists in the simple insertion of a few words, such as ‘for us’ or ‘for humans’.\textsuperscript{48} According to him, the problem with this correction is that it is clearly contradicts the meaning of these ancestral statements.

In order to get to the heart of the issue, Meillassoux confronts the correlationist position with the simple question of whether or not the Earth did in fact accrete 4.56 billion years ago. On the one hand, he says, the correlationist can answer “yes”, by arguing along (what he claims are) Kantian lines, namely that ‘the scientific statements pointing to such an event are objective’ because they have been ‘inter-subjectively verified’.\textsuperscript{49} On the other hand the correlationist might answer “no”, ‘because the referent of such statements cannot have existed in the way in which is… described, i.e., as non-correlated with a consciousness’.\textsuperscript{50} Meillassoux’s claim is that when taken together these answers are ‘a non-sense’.\textsuperscript{51} For it cannot be that the statement that the Earth accreted 4.56 billion years ago is “objectively” true, meaning that it actually occurred 4.56 billion years ago, if the event in question is impossible.

\textsuperscript{46} Meillassoux notes in passing that unlike the \textit{bona fide} correlationist, ancestral statements pose no problem for the ‘metaphysician who upholds the eternal-correlate’ because they ‘can point to the existence of an “ancestral witness”, an attentive God, who turns every event into a phenomenon, something that is “given-to”, whether this event be the accretion of the earth or even the origin of the universe’ (AF, 11). This, of course, is Berkeley’s strategy.

\textsuperscript{47} Ibid., 13.

\textsuperscript{48} Meillassoux refers to this insertion as ‘the codicil of modernity’. It maintains that science is correct on its own terms but that there is a deeper ‘correlationist meaning activated by the codicil’ (AF, 13–14).

\textsuperscript{49} AF, 16

\textsuperscript{50} Ibid.

\textsuperscript{51} Ibid.
because it is uncorrelated with consciousness. He concludes that ‘all that correlationism can say about ancestrality is that it is a subjective representation of such a past – but that this past couldn’t really have existed in itself with all its objects and events’.

Why does Meillassoux hold that the events to which ancestral statements refer are impossible for correlationism? Why are ancestral statements ‘a non-sense’ for correlationism? To deal with this, I need first to turn to his account of the ways in which correlationism is compatible with scientific statements that pertain to contemporary events or those ones that occurred in the less distant past.

In the case of scientific statements concerning observed contemporary events, Meillassoux argues that both the meaning of these statements and the world to which these statements pertain can be conceived as correlated with us. That is, the world to which these statements apply is the world “for us”: it is the world as it is given to, or witnessed by, us, and hence relative to, or correlated with, our experiential frameworks, however these are construed. What of statements pertaining to unobserved entities and events of the more recent past? In what way and to what extent do they differ from ancestral statements? Meillassoux contends that ‘the argument from the unperceived is trivial and poses no threat to correlationism’. He argues that insofar as unperceived events – whether in the distant past, in distant quarters of space or simply when and where there is an unperceived event (e.g., a tree falling unperceived) – occur ‘when there is already givenness’ they can be reconstructed or reconceived as if they were synchronic with the lives of possible witnesses. According to Meillassoux, the simple procedure of deploying a ‘counter-factual such as … had there been a witness then this occurrence would have been perceived in such and such a fashion’ is sufficient to leave the correlationist position unscathed by unperceived events. That is, the fact that these events are not witnessed is no barrier to their being conceived and understood as if they had been witnessed. As such, he claims, these events can be understood as if they were given to, and hence correlated with, us. In contrast, the events referred to by ancestral statements cannot be reconceived by correlationist procedures. The reason for this, Meillassoux argues, is that

52 TWB, 5.
53 AF, 20.
54 Ibid.
55 Ibid., 19–21.
ancestral statements index a diachronic time, which, he says, is a time logically prior to (and hence by definition uncorrelated with) any and all forms of givenness.

Meillassoux later notes that insofar as diachronicity ‘concerns every discourse whose meaning includes a temporal discrepancy between thinking and being’, it pertains ‘not only [to] statements about events occurring prior to the emergence of humans, but also statements about possible events that are ulterior to the extinction of the human species’. His argument is that the diachronic is by definition incompatible with the “had there been a witness” correlationist rejoinder. This counterfactual procedure fails to incorporate the ancestral or diachronic because it ‘would presuppose precisely what is being called in to question: if a consciousness had observed the emergence of terrestrial life, the time of emergence of the given would have been a time of emergence in the given’. In other words, to say that ancestral events can be correlated with “the given” is to misunderstand that ancestral claims pertain to that which is not only not given, but is ‘prior to givenness in its entirety’. Ancestral time is ‘a time in which the given as such passes from non-being into being’. Insofar as the ancestral or the diachronic index a time at which nothing appeared or was given to any experiencing being, and from within which a time correlated with experience or givenness emerged, that time and the events therein cannot be construed as correlative with us. As we have seen, at the heart of the incompatibility between correlationism and the ancestral lies the question of the meaning of a time prior to thought. Meillassoux reformulates the issue sharply when he asks:

How … one [could] give sense to the idea of a time preceding the subject or consciousness or Dasein; a time within which subjectivity or being-in-the-world itself emerged – and perhaps will disappear along with human and terrestrial life – if one makes of time, and space, and the visible world, the strict correlates of this subjectivity? If time is a correlate of the subject, then nothing can precede the subject – as individual or more radically as human species – within time. Because what existed before the subject existed before the subject for the subject. Appeals to intersubjectivity are of no account here, since the time in question is not the time preceding such and such an individual – this time is still social, made up of the subjective temporality of the ancestral – but a time preceding all life, and so every human community.

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56 Ibid., 112.
57 Ibid.
58 Ibid., 21.
59 Ibid.
60 TWB, 4.
Meillassoux’s contention that ancestral statements and correlationism are incompatible has been met with incisive critique. Peter Hallward and Ray Brassier have both found his argument unconvincing, though each for different reasons. In the next section I deploy their critical commentary to interrogate and clarify the argument underpinning this claim.

The Challenge of the Ancestral? Comments and Criticism

This section comprises three sub-sections. The first sets out Peter Hallward’s three related objections to Meillassoux’s claim that ancestral statements are incompatible with correlationism. The second responds to Hallward’s complaint that Meillassoux’s rendering of correlationism equivocates between epistemology and ontology. Here, I develop a limited defence of Meillassoux’s claim that correlationism holds that what exists is a correlate of thought. I argue that there is a sense in which Kant can be understood as replacing dogmatic “proud” ontology with a more modest ontology of appearances. In addition to introducing some of the central elements of Kant’s transcendental idealism, this section concludes with a brief account of the way in which Heidegger draws on Kant’s theory of experience to develop his phenomenological ontology, according to which both ontological categories (such as being and existence) and our claims about objects, are incoherent in a world without human beings. The third sub-section turns to Hallward’s characterisation of the incompatibility between ancestral claims and correlationism. I draw on Nathan Brown’s critical engagement with Hallward’s argument and Ray Brassier’s exposition and critique of Meillassoux’s characterisation of ancestral claims, in order to assess the purported incompatibility between ancestral claims and correlationism. These three sub-sections, based on replies to Hallward’s critique, are followed by two further sections. The first addresses Brassier’s argument, as articulated in Nihil Unbound, that, unlike ancestral claims, knowledge of the end of time and thought entailed by the entropic heat death of the universe does undermine correlationist finitude because it demonstrates that thought, like everything else, is but one more perishable thing in the universe. This is followed by a brief account of Kant’s theory of knowledge in relation to scientific enquiry in which I argue that Kant’s correlationism can straightforwardly accommodate both ancestral time and the time of the extinction of all human thought.
Hallward’s Critique

‘As Meillassoux knows perfectly well’, Hallward writes, ‘all that the correlationist demands is an acknowledgement that when you think of an ancestral event, or any event, you are indeed thinking of it’. ¹ For Hallward, the epistemological claim that we can have no knowledge of things in themselves because we cannot but think in thought has no bearing on the existence of what there is. It does not follow from the fact that there is no means of knowing objects as they are in themselves that the existence of objects depends on our thought, even if what we can know about these objects does. Thus, according to Hallward, Meillassoux is wrong to insist that correlationism holds that ‘to be is to be a correlate’. He remarks that this position is in fact held only by ‘a few fossilized idealists’, which is why, he says, ‘almost no-one balks at ancestral statements’. ² It is also why ‘correlationism’, he argues, ‘is perfectly compatible with the insights of Darwin, Marx or Einstein’.³ For Hallward, ancestral statements concerning events that took place prior to the advent of thought are not fundamentally different from statements concerning ‘an event that took place yesterday’.⁴ Indeed, he correctly notes that even from ‘an orthodox Kantian perspective’ there would be no ‘more trouble accepting an ancestral statement about the accretion of the Earth than … accepting a new scientific discovery about previously unperceived “magnetic matter”, or the discovery of hitherto undetected men on the moon’.⁵ Whether witnessed or not, ‘[o]n Kantian grounds’, Hallward claims, all correlationism entails is that cognition of the universe and the events and objects therein requires ‘an ability to grasp the event in terms of the relation basic to the “cognition of any possible experience”’.⁶ He explains that on Kantian grounds, grasping an event requires sensible intuition or perception of that event (or its traces available to empirical science) according to the rule of causal succession. Like all empirical and scientific statements that make claims about objects and events in the universe, ancestral statements rely on evidence (here established through scientific techniques and the observations they allow) and our

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² Ibid. Hallward does not provide names of these ‘fossilized idealists’, though Berkeley seems the best fit.
³ Ibid.
⁴ Ibid.
⁵ Ibid. As Hallward notes, magnetic matter and men on the moon are Kant’s own examples. They are referred to in the Critique at A493/B521, 512, and at A226/B273, 325, respectively.
⁶ Ibid.
conceptual and intuitive frameworks that underpin our empirical knowledge of the universe and its furniture. The consequence of this is that the strategy by which Meillassoux hopes to overcome Kantian finitude and secure knowledge of things as they are in themselves is undermined from the outset. According to Hallward, overcoming correlationism requires more than establishing that objects and events exist independently of thought: we would also have to demonstrate that knowledge is possible without thought and sensation. His point is that Kant’s correlationism entails that we cannot know things as they are in themselves because knowledge of the world requires both thought and sensation. Thus, for Hallward ‘[g]enuine conquest of the correlationist fortress would require not a reference to objects older than thought but to processes of thinking that proceed without thinking or objects that are somehow presentable in the absence of any objective presence or evidence’. 67 He concludes: ‘Anyone can agree with Meillassoux that “to think ancestrality is to think a world without thought – a world without givenness of the world” … what is less obvious is how we might think of such a world without thinking it, or how we might arrive at scientific knowledge of such pre-given objects if nothing is given of them.’ 68

Replies to Hallward

a) From Proud Dogmatic Ontology to Humble Correlationist Ontology.

Despite the apparently considerable force of Hallward’s critique, it relies on a mischaracterisation of Meillassoux’s argument. In particular, it relies on demonstrating that Meillassoux’s account of both correlationism and the ancestral is just mistaken and that, therefore, there really is no incompatibility between the two. 69 A more charitable approach would be to take Meillassoux’s argument at its strongest. One way to do this is to set out how Meillassoux might respond to Hallward’s principal complaints. As we have seen, his first

68 Ibid. Hallward’s critique of Meillassoux’s claim that ancestral statements are incompatible with correlationism is broadly commensurate with the epistemological reading of Kant’s correlationism I defend in this thesis. Hallward’s claim that correlationism is principally an epistemological (as opposed to ontological) thesis underpins his argument that breaching its defences would entail demonstrating that we might know things for which we have no empirical evidence and as they are not thought. Although he is right to claim that we cannot know things without thinking them, Hallward’s brief reply to Meillassoux neither defends the truth of (Kant’s) correlationism nor demonstrates that statements produced by the empirical sciences (about evolution, the ancestral universe, or relativity, for example) do not, in fact, constitute knowledge of things as they are in themselves.
69 This is not to say that Hallward’s overall evaluation is incorrect. In fact, the conclusions I draw through my defence of Kant’s correlationism agree with the basic thrust of Hallward’s critique.
complaint is that Meillassoux equivocates between epistemology and ontology in his characterisation of correlationism. Unfortunately, Meillassoux’s actual response to this charge does little to help his case. In reply to his 2007 presentation of the central ideas in *After Finitude* at Goldsmiths’ College, Hallward directly confronts Meillassoux: ‘it seems to me’ says Hallward ‘that you shuttle between an ontological argument that you associate with metaphysics . . . and use that to demolish what are essentially epistemological arguments that underpin the correlationist post-Kantian position’. In reply, Meillassoux acknowledges the criticism but seems to ignore the problem: ‘Correlationism – you’re right – is not an ontology, strictly speaking. The correlationist – it’s true – doesn’t say that reality is the correlation. It’s the metaphysics of subjectivity that says that. He just says we cannot know anything apart from what we can perceive or conceive, etc. That’s all. I refuse to say, on the contrary, that I can’t say anything about the absolute’.70

If this is Meillassoux’s position, then why insist that for the correlationist, ‘to be is to be a correlate’ or that ‘anything that is totally a-subjective cannot be’?71 Are these statements not straightforwardly equivalent to the ontological claim ‘that reality is the correlation’? In one sense, this question lies at the heart of Meillassoux’s argument. For, as Hallward notes, his immanent critique of correlationism relies on establishing that the correlationist conclusion that knowledge of things in themselves is impossible leads to the more radical view that nothing can be independent of thought. That procedure will be explained in the next section, and assessed in Chapter 3, where I focus on the distinction he draws between weak and strong variants of correlationism. Here, however, it will be necessary to come to Meillassoux’s defence, at least to some extent. For unless something can be made of his claims that correlationism holds that ‘to be is to be a correlate’ or that ‘anything that is totally a-subjective cannot be’ we will simply have to concede that Hallward is correct – Meillassoux’s efforts to overcome correlationism are founded on the elementary error of confusing how we know with what we know.

Hallward is right to note that the epistemological claim that there is no means of knowing the world except through our means of knowing has no bearing on what there is and whether it

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71 AF, 38.
exists “out there”, so to speak. Indeed, it is for this reason that the vast majority of philosophers maintain the realist view that the universe and (at least some) of its furniture exist independently of us, even where it is admitted that this belief cannot be proved or that we cannot know anything about the universe as it is in itself. On the other hand, we find that philosophers have said things that seem to entail the extravagant position that there is in fact no mind-independent world. A few examples, taken entirely out of context, from both continental and analytical traditions, include the following. Richard Rorty writes that he does ‘not believe in “mind-independent reality”’. Hegel holds that “[self]-consciousness is all reality, not merely for itself but also in itself.” Heidegger states that “[if] Dasein does not exist, there is no truth, and then there is nothing at all”. Nietzsche’s less explicitly ontological claim is that the notion ‘that things possess a constitution in themselves quite apart from interpretation and subjectivity, is a quite idle hypothesis’, because ‘it presupposes that interpretation and subjectivity are not essential, that a thing freed from all relationships would still be a thing’. Donald Davidson expresses a similar view when he writes that ‘it is futile either to reject or to accept the idea that the real and the true are “independent of our beliefs”’. Perhaps the clearest idealist variant of these anti- (or ir-, or non-) realist positions can be found in Nelson Goodman’s work and his notion of world-making. Goodman claims

[72] My qualification that ‘(at least some) of its furniture exist independently of us’ registers the fact that there are of course events and entities whose existence is clearly constituted or dependent upon the actual existence of perceiving or experiencing beings. But this raises the question of the extent to which these objects, events and entities can be said to exist independently of us. Whatever else is the case, it would seem straightforward to claim that the existence of human thought is dependent on the existence of thinkers. Then again, when human beings no longer exist, there may still be traces of human thought contained within books and electronic data, for example. When human beings cease to exist, at least some constructed objects (and even traces of thought) would probably remain. That is, although created objects are causally dependent on us, they seem to be ontologically independent of us. In contrast, there is clear sense in which the existence of what might be termed “social realities” such as money, governments, nations, societies, and bank holidays, are both causally and ontologically dependent on us. Nonetheless, even if we grant the ontological independence of objects that may exist following the extinction of humanity (and, for good measure, the extinction of any other sensing being) the question of determining what these objects would be in our absence remains.


[76] Friedrich Nietzsche, The Will to Power, ed. Walter Kaufmann, trans. Walter Kaufman and R. J. Hollingdale (New York: Random House, 1968), 303. The remainder of this passage is worth quoting. Nietzsche wonders whether ‘the apparent objective character of things…could not be merely a difference of degree within the subjective’. He asks whether characterising ‘being, “in-itself” as “objective” is only a false concept of a genus and an antithesis within the subjective’.

that ‘the features of the world derive from – are made and imposed by – versions [by which he means linguistic, symbolic and artistic systems]’. These worlds are not just possible worlds: they are, says Goodman, ‘literal’ worlds. Insofar as Goodman takes all worlds to be constructed, there is no mind- (or ‘version’-) independent reality. Despite their subtle and important differences, then, each of these quotations can be understood as holding either (or both) that there is no mind-independent world (i.e., no things in themselves) or that the notion is meaningless. (We shall see in Chapter 3 that the distinction between these positions plays a decisive role in Meillassoux’s argument because he needs to demonstrate that although correlationism is driven to the view that the notion of things in themselves is meaningless, it must also reject the view that there is no mind-independent world, or be forced to embrace absolute idealism.)

Now, although Meillassoux’s argument suffers somewhat from a failure to characterise different articulations of correlationism in terms of this shift from epistemology to ontology, the move can be understood more clearly by unpacking Kant’s claim that ‘the proud name of ontology, which presumes to offer synthetic a priori cognitions of things in general… must give way to the more modest one of a mere analytic of the pure understanding’. Kant’s target here is the (‘proud’) ontology characteristic of dogmatic metaphysics. Ontology in the proud sense is ontology as understood by dogmatic metaphysicians – as an a priori science of the most general principles of things as they are in themselves, of being qua being. Unlike the dogmatic approach that seeks to demonstrate that the most general principles and concepts available to us can be derived a priori and applied to the world as it is in itself, Kant’s approach converts the

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79 David Lewis’s modal realism shares with Goodman the view that there are multiple actual (even logically inconsistent) worlds but unlike Goodman, Lewis holds that all possible worlds are real precisely in the sense that they are not our constructs. Goodman’s worlds made by symbolic versions (and, therefore, not independent of these symbolic version and symbol users and makers) are obviously very different to Lewis’s possible world realism, though no less actual. Lewis (2008, 85) makes the difference very clear:

I emphatically do not identify possible worlds with respectable linguistic entities; I take them to be respectable entities in their own right. When I profess realism about possible worlds, I mean to be taken literally. Possible worlds are what they are, and not some other thing. If asked what sort of thing they are, I cannot give the sort of reply my questioner probably expects: that is, a proposal to reduce possible worlds to something else. I can only ask him to admit that he knows what sort of thing our actual world is, and then explain that other worlds are more things of that sort, differing not in kind but only in what goes on at them. Our actual world is only one world among others.

80 CPR, A247/B303, 358.
ontological question about the general principles of what exists into the epistemological question about the conditions under which it is possible to make claims to knowledge about objects of possible experience. So, when Kant claims that the ‘proud name of ontology…must give way to the more modest one of [an] analytic of the pure understanding’, he means that dogmatic ontology must give way to an analysis of both the rules governing our understanding and the legitimate application of these rules. After establishing in the Transcendental Aesthetic that the sensory manifold given to us in perception is pre-formed by the pure forms of our intuition (space and time) Kant sets out to deduce the conceptual framework through which that manifold is unified in experience and through which all human thought and experience must occur. In the Transcendental Analytic he argues that our experience and possible knowledge of objects are underpinned by formal logic (e.g., the principle of contradiction) and the categories (or pure concepts) of the understanding (as set out in the Table of Categories). Because human cognition is discursive and not purely intuitive, these principles can yield knowledge of the world only insofar as they pertain to objects of possible sensible intuition, i.e., objects given to the senses as pre-formed by the pure forms of our intuition. The upshot is that we can know the world and its furniture only as they appear; we cannot know the world and its furniture as they are in themselves, as they might be known to a purely intuitive intellect. While this cursory sketch of some of the central features of Kant’s transcendental idealism will be filled out in more detail shortly and developed throughout, what is important here is that although Kant will deny the possibility of ontology (understood as the *a priori* science of being as such) his shift from dogmatic ontology to the *a priori* science of things considered as appearances, or as they are “for us”, can be understood as a reformulation or revision of ontology. This, however, is highly controversial, since the question of whether Kant’s critique of metaphysics constitutes an outright rejection of ontology lies at the heart of Kantian scholarship. Nonetheless, Markus Gabriel has argued that Kant can be understood as having proposed

a revisionary ontology …that offers a reconstruction of all basic ontological terms from the tradition (existence, the modalities, entity and object, and so on) without any need to think of these as properties of the things in themselves. Instead, he restricts meaningful application of ontological vocabulary to the domain of things

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81 Ibid., A80/B106, 212. I turn to a focussed analysis of Kant’s Transcendental Deduction in Chapter 5.
82 Indeed, as we shall see, this issue is fundamental to my critique of Meillassoux’s argument.
experienceable by us, or rather to the things systematically related to things experienceable by us.\textsuperscript{83}

Although I think Gabriel is wrong to claim that Kant’s revisionary ontology is directly at odds with his claim that things in themselves exist, there is, nonetheless, some textual evidence to suggest that Kant does indeed reconfigure ontology along the lines suggested by Gabriel.\textsuperscript{84} Kant uses the word ‘ontology’ only three times in the \textit{Critique}, once in the passage quoted above; once in his description of the constituent parts of ‘the entire system of metaphysics’; and once in his discussion of transcendental philosophy in the chapter on the Architectonic of Reason.\textsuperscript{85} In the Architectonic of Reason, Kant states that transcendental philosophy ‘considers only the understanding and reason itself in a system of all concepts and principles that are related to objects in general, without assuming objects that would be given (\textit{Ontologia}).\textsuperscript{86} This definition of transcendental philosophy is analogous to his definition of the pure categories of the understanding, which, he says, are the means by which we ‘think objects in general without seeing to the particular manner (of sensibility) in which they might be given’.\textsuperscript{87} But the legitimate application of the categories is restricted. Although ‘[w]e cannot think any object except through categories’, cognition of objects requires ‘[sensible] intuitions that correspond to those concepts [i.e. the categories]’. ‘Consequently’, explains Kant, ‘\textit{no \textbf{a priori}} cognition is possible for us except solely of objects of possible experience [i.e., objects


\textsuperscript{84} Gabriel argues that because existence is a category that pertains to objects considered as appearances, Kant cannot claim that things in themselves exist. Indeed, Gabriel claims that when his revised ontology is understood as the restriction of the ‘meaningful application of ontological vocabulary to the domain of things experienceable by us’ then ‘Kant is at least committed to the following conditional, which lies at the heart of transcendental idealism, and which is the real formula of what Meillassoux wants to criticise as ‘correlationism’[\ldots] Had no human understanding (and therefore no one of our species) ever been around, nothing would have been actual’ (2015, 78). The reading of Kant’s transcendental idealism I defend would not endorse this conditional. For it is not clear that Kant is committed to the view that nothing would have been actual in the absence of human beings. Gabriel seems to conflate Kant’s view that we can only know that which is actual when actuality is understood according to our intuitive-epistemic framework, with the view that nothing is or could be actual in the absence of beings with that intuitive-epistemic framework. Even if we take Kant to be saying that what it means for something to be actual is for it to be actual \textit{according to} some epistemic-intuitive framework, this does not mean that there would be no actual objects in the absence of beings with an epistemic-intuitive framework.

\textsuperscript{85} CPR, A847/B875, 699. Kant’s critique of ontological arguments for God’s existence is intimately connected to his critique of dogmatic ontology. As we shall see in the next chapter, Kant argues that we cannot derive the existence of any entity from its concept alone.

\textsuperscript{86} Ibid., A845/B873, 698. Bold text emphasis in the passages I quote from the \textit{Critique} are taken from Guyer’s and Wood’s translation.

\textsuperscript{87} Ibid., A254/B309, 350.
of possible sensible intuition]. In other words, although the categories are the means by which we think any object whatsoever, they can provide knowledge – whether *a priori* or empirical – only of the objects of possible or actual experience. They cannot yield knowledge of things as they are in themselves. While this means that although proud dogmatic ontology is impossible, there is a sense in which *a priori* knowledge of appearances constitutes a more humble ontology – an *a priori* science of being considered as it appears according to our epistemic and intuitive framework. (The important larger question of whether Kant’s thought should be characterised as either a rejection of ontology *tout court* or a revised ontology will return in my exposition of Kant’s transcendental distinction between appearances and things in themselves in Chapter 3.)

Whether or not Kant replaced dogmatic ontology with humble ontology, it is nonetheless clear that post-Kantian philosophies have drawn ontological conclusions from the epistemological thesis that we cannot know or experience the world apart from our modes of cognition. Although the claim that the basic features we ascribe to the world are ontologically dependent on us (because they are constituted through our categories, forms of intuition, language games, cultures, discourses, etc.) does not entail a denial of the existence of a mind- (or framework-) independent world, it does suggest that answers to questions concerning what is are ultimately restricted to the ways in which our categories or frameworks carve up the world of experience.

Perhaps the most explicit and strident deployment of an ontology of appearances in the post-Kantian tradition can be found in Heidegger’s philosophy. Although Heidegger rejects the coherence of the notion of the thing in itself when it is construed as the God’s-eye perspective on the world, the central lesson he takes from Kant’s transcendental idealism is that ‘we can only think, talk about, and attribute Being to what is in principle encounterable … Being just is Being as it shows itself to Dasein.’ And insofar as something can be “encountered” there

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88 Ibid., B166, 264.
89 Braver, *A Thing of This World*, 186. Heidegger rejects the notion of the thing in itself as the God’s-eye perspective on the world because, he says, the idea of purely intellectual intuition is incoherent. Heidegger explains that:

Along with the assumption of an absolute intuition … the concept of a thing in itself also dies away. But things do not thereby vanish into phantoms and images – phantoms and images which we produce for ourselves. For *appearances are the things themselves*, and they are the things that they are without these things
must be “Dasein”. Accordingly, for Heidegger, ‘only as long as Dasein is (that is, only as long as an understanding of Being is ontically possible), “is there” Being’.\(^90\) Indeed, Heidegger explains that,

> [w]hen Dasein does not exist ‘independence’ ‘is’ not either, nor ‘is’ the “in-itself”. In such a case [where Dasein does not exist] this sort of thing can be neither understood nor not understood. In such a case even entities within-the-world can neither be discovered nor lie hidden. In such a case it cannot be said that entities are, nor can it be said that they are not. But now, as long as there is an understanding of Being and therefore an understanding of presence-at-hand, it can indeed be said that in this case entities will still continue to be… As we have noted, being (not entities) is dependent upon the understanding of being; that is to say, Reality (not the Real) is dependent upon care.\(^91\)

In other words, for Heidegger, although objects are not ontically dependent on us (we do not construct stars, mountains, and giraffes), their “Being” is. In the absence of us (or Dasein) there is neither ‘independence’ nor an ‘in itself’. Indeed, in our absence, stars or mountains would neither exist nor not exist. This is not only the trivially true claim that, in the absence of humans the term “existence” (and the terms “giraffes” and “stars”) would not exist, it is also the more radical claim that their “Being” depends on us (‘the understanding being’). Thus, to be (or not to be), is to be (or not to be) “for us”.\(^92\)

In addition to laying some of the groundwork for a more comprehensive treatment of Kant’s transcendental idealism in later chapters, the aim of this sub-section has been to offer a limited defence of Meillassoux’s characterisation of correlationism. We can generalise here by saying that although correlationists do not think that our discourse or experience creates mountains, giraffes and stars, ‘strong’ correlationists will deny that any sense can be made of the claim that they exist (or do not exist) as mountains, giraffes and stars independently of our discourses and experience. I take it that this is why, in his reply to Hallward, Meillassoux concedes that, strictly

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\(^{91}\) Ibid., 255.

\(^{92}\) See Blattner (2006, 114–116) for an account of how this approach allows Heidegger to avoid both realism and idealism. A similar approach is found in Richard Rorty’s thought. A particularly clear, jargon free articulation of Rorty’s view that we do not know things in themselves (because we carve a jointless reality up for pragmatic purposes) can be found in his lively debate with John Searle (1999).
speaking, correlationism is not an ontology. Correlationism is not an ontology because it cannot provide an ontology of things as they are in themselves. Less strictly speaking, however, correlationism does make ontological claims, because it holds that what it means for something to be (or not to be), is for it to be (or not) “for us”; i.e., according to our language, discourse, categories, culture, life-world, Dasein, etc. This is also why Meillassoux notes that although correlationism will grant that there is an exteriority to thought, that exteriority is “always-already” constituted by, or “for”, us. Thus, despite the fact that Husserl entreats us to ‘go back to the “things themselves’”, phenomenological ontology remains trapped in a ‘transparent cage’. Meillassoux has phenomenology in mind when he writes:

Correlationism readily insists upon the fact that consciousness, like language, enjoys an originary connection to a radical exteriority (exemplified by phenomenological consciousness transcending or as Sartre puts it ‘exploding’ towards the world); yet on the other hand … this very exteriority … seems to us to be a cloistered outside, an outside in which one may legitimately feel incarcerated…this is because in actuality such an outside is entirely relative, since it is – and this is precisely the point – relative to us. Consciousness and its language certainly transcend themselves towards the world, but there is a world only insofar as a consciousness transcends itself towards it …This is why, in actuality, we do not transcend ourselves very much by plunging into such a world, for all we are doing is exploring the two faces of what remains a face to face – like a coin which only knows its own obverse.

The argument with which Meillassoux defends ‘strong’ post-Kantian correlationism against Kant’s ‘weak’ correlationism will be addressed in Chapter 3. What is crucial here, however, is that the ontological claims Meillassoux attributes to a variety of post-Kantian positions are not predicated on his illicit conflation of epistemology with ontology. Post-Kantian philosophies have indeed drawn ontological conclusions from the epistemological thesis that we cannot know or experience the world apart from our modes of cognition. This is not to say that I think ontological claims should be drawn from Kant’s theory of appearances, but it is to say that Meillassoux might have responded more robustly to Hallward’s critique.

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94 AF, 7.
b) The Challenge of the Ancestral

As we have seen, Hallward complains that correlationism really has no problem with ancestral claims. It simply claims that what we know about the universe, ancestral or otherwise, requires that there be some sensible intuition or perception of that event (or its traces available to empirical science) that can be reconstructed and unified according to rules which have their ground in our cognitive faculties. However, Nathan Brown insists that Hallward has misunderstood Meillassoux’s characterisation of the ancestral. In particular, he has failed to ‘account for the logical succession inherent in such a thought [i.e., the thought of that which is prior to thought]’. Brown explains that ‘when the correlationist thinks the ancestral object *qua* correlate of thought, she effects a temporal retrojection of the past from the present’. Rather than following a chronological order, the correlationist’s temporal retrojection must follow a logical order; a causal reconstruction of the past on the basis of the conditions of our experience. It is in this sense that, for the correlationist, being means being-for-thought. And it is for this reason, claims Brown, that ‘the correlationist cannot think ancestral objects as prior to the thought that thinks them’. He continues:

> Meillassoux’s argument is simply that if we accept the priority of logical over chronological succession (‘the transmutation of the diachronic past into a retrojective correlation’) we will be unable to assess scientific statements regarding ancestral phenomena without destroying the veritable meaning of those statements, which concern the chronological priority of that which came before thought, regardless of any temporal retrojection performed by thinking. \(^{97}\)

If, as Meillassoux argues, the ancestral indexes the time prior not only to the advent of thought but also the time in which thought emerged (and in which it might not have emerged at all) then there is a ‘chronological disjunction’ between thinking and being. Meillassoux’s argument is that this disjunction is at odds with the correlationist procedure of prioritising the logical correlation between thinking and being (wherein being is retrojectively conceived according “to us” or “for thought”) over the chronological priority of the ancestral. Thus, for the correlationist, Meillassoux argues, ‘the deeper sense of ancestrality resides in the logical

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96 Ibid. Content in brackets from AF, 123.
97 Ibid.
98 Ibid.
order, rather than from past to present following a chronological order’. But, as Brown explains, the problem here is that ‘the correlationist insistence [on the logical priority of thought] eviscerates the proper import [of the chronological meaning] of the ancestral’. That is, the correlationist procedure of retrojecting thought into the past is fundamentally at odds with the meaning of ancestral statements because the ancestral indexes a space-time prior to thought (and hence givenness); a space-time which, it is claimed, is incompatible with that retrojection. Thus the fact that science is able to produce knowledge of the ancestral ought to be a problem for correlationism because the space-time of the ancestral (wherein ‘transcendental subjects went from not-taking-place to taking-place’) ‘concerns the space-time anterior to the spatio-temporal forms of representation’.

Ray Brassier develops a similar account of the argument at the heart of Meillassoux’s claim that ancestral statements and correlationism are fundamentally at odds. He explains that, for Meillassoux, ‘the arche-fossil indexes a reality which … refuses to be integrated into the web of possible experience linking all cognizable objects to one another, because it occurred in a time anterior to the possibility of experience. Brassier’s exposition of Meillassoux’s argument is usefully framed as a direct reply to Kant’s account of the way in which we make sense of the ‘inconceivable [undenklicher] past time prior to my own existence’. According to Kant,

[the real things of past time are given in the transcendental object of experience, but for me they are objects and real in past time only insofar as I represent to myself that, in accordance with empirical laws, or in other words, the course of the world, a regressive series of possible perceptions (whether under the guidance of history or in the footsteps of causes and effects) leads to a time-series that has elapsed as the condition of the present time, which it then represents as real only in connection with a possible experience and not in itself; so that all those events which have elapsed from an inconceivable [undenklicher] past-time prior to my own existence signify nothing but the possibility of prolonging the chain of experience, starting with the present perception, upward to the conditions that determine it in time.]

99 AF, 16.
100 Brown, ‘The Speculative and the Specific’, 143.
101 AF, 26.
103 CPR, A495/B523, 513. The translation in Guyer’s and Wood’s edition renders the German undenklicher as ‘inconceivable’ whereas in the Kemp Smith’s translation of the *Critique* (1929) that Brassier uses, undenklicher is rendered ‘immense’ (442). Guyer’s and Wood’s translation is more accurate, but it raises the question of what Kant takes to be inconceivable about the ‘past-time prior to my own existence’.
104 Ibid.
Here Kant does indeed claim that our knowledge of the ancestral is gained through a logical temporal retrogression, ‘a regressive series of possible perceptions… starting with present perception’. On this account, the ancestral is represented as a possible experience or as if there ‘had been a witness’, to use Meillassoux’s expression.\(^{105}\) We do not represent ancestral events as they are in themselves; they are represented as possible appearances. This, of course, follows from Kant’s view that all that we can know about the world and all that we can represent to ourselves about events and entities in the universe is in accordance with the conditions of our experience; which is to say, as spatiotemporal and as subsumable under the categories of the understanding. The fact that scientists take their claims about the ancestral, the spatially remote or the presently perceived to refer to things in themselves does not alter the fact that for Kant all our knowledge of the objects and events in the universe is knowledge of things as they appear. Brassier replies to Kant’s characterisation of the representation and possible knowledge of past events by explaining why that characterisation is for Meillassoux incompatible with the meaning of ancestral statements:

We cannot represent to ourselves any regressive series of possible perceptions in accordance with empirical laws capable of conducting us from our present perceptions to the ancestral time indexed by the arche-fossil. It is strictly impossible to prolong the chain of experience from our contemporary perception of the radioactive isotope to the time of the accretion of the earth indexed by its radiation, because the totality of the temporal series coextensive with possible experience itself emerged out of that geological time wherein there simply was no perception. We cannot extend the chain of possible perceptions back prior to the emergence of nervous systems, which provide the material conditions for the possibility of perceptual experience … In flagrant disregard of those transcendental conditions which are supposed to be necessary for every manifestation, they [ancestral statements] describe occurrences anterior to the emergence of life, and objects existing independently of any relation to thought.\(^{106}\)

Brassier’s formulation of Meillassoux’s position brings two of his arguments to the fore. The first is that we cannot extend ‘the chain of experience’ from current perception to the time of the events indexed by ancestral statements because ‘possible experience… emerged out of geological time wherein there … was no perception’. The second argument is that ‘possible perceptions’ cannot be extended to before ‘the emergence of nervous systems’ because nervous systems ‘provide the material conditions for the possibility of perceptual experience’.

\(^{105}\) AF, 19.

\(^{106}\) Brassier, *Nihil Unbound*, 52–53. Brassier also notes that the same argument applies to what he calls science’s ‘descendent statements’. Both ancestral and descendent statements index a time without thought.
We have already encountered the first argument: the ancestral indexes a time not only before perception but also a time from which it emerged and, hence, by definition a time uncorrelated with possible perception. Thus it is claimed that the logical retrojection of perceptions into that time is incompatible with the meaning of statements about that time. The time of logical retrojection remains within, or correlated with, time “for us”; whereas the time of the ancestral is time as it is not correlated with us. Thus, knowledge of ancestral time cannot be knowledge of time as it is both for and not “for us”. The second argument bolsters the first with a transcendental argument to demonstrate that the coming into existence of an experiencing subject requires a particular material condition. Here, the body (or the nervous system as Brassier frames it) is viewed as a requirement for the emergence and hence possibility of an experiencing subject. Thus, according to Meillassoux, although ‘the transcendental is the condition for knowledge of bodies … it is necessary to add that the body is also the condition for the taking place of the transcendental’. Meillassoux explains that ‘objective bodies may not be a sufficient condition for the taking place of the transcendental, but they are certainly a necessary condition for it’. Although Meillassoux concedes that the transcendental subject (i.e., the subject insofar as it is the formal set of conditions under which knowledge and experience of the world are made possible) does not exist as an empirical entity in space and time, he nonetheless insists that in order to be operative, or to ‘take place’, the transcendental subject must be instantiated in a body, or incarnated. The crucial point is that the transcendental subject must be individuated (in a body) in order to assume a perspective on the world. Thus, Meillassoux writes, ‘[t]he transcendental remains indissociable from the notion of a point of view’. In contrast to a subject without a point of view, ‘[t]he subject is transcendental only insofar as it is positioned in the world, of which it can only ever discover a finite aspect, and which it can never recollect in its totality’. Whereas ‘a subject without any point of view on the world …would have access to the world as a totality…[as a] transparent object of an immediately achieved and effective knowledge … [without] sensible receptivity and its spatio-temporal form’, the transcendental subjects is finite, limited, and knows the world through ‘sensible receptivity and its spatio-temporal form’. In the absence of sensibility there would

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107 AF, 25.  
108 Ibid.  
109 AF, 24.  
110 Ibid.  
111 Ibid., 25.  
112 Ibid., 24.
be no transcendental subject and, therefore, no correlation. Meillassoux argues that, insofar as the transcendental subject must be instantiated in a body, the body becomes a logical (rather than merely empirical) condition for the ‘taking place’ of the transcendental.  

This seems to be the crux of Meillassoux’s claim that ancestral statements make sense only if they are incompatible with correlationist rejoinders. Ancestral time indexes the time in which the corporeal conditions for the taking place of the transcendental (upon which the correlation depends) came into existence. ‘We thereby discover’, claims Meillassoux, ‘that the time of science temporizes and spatializes the emergence of living bodies; that is to say the emergence of the conditions for the taking place of the transcendental’. The consequence of this is that the fact that ‘subjects appeared in time and space, instantiated by bodies, is a matter that pertains indissociably both to objective bodies and to transcendental subject’. Thus Meillassoux argues that the problem of the ancestral ‘cannot be thought from the transcendental viewpoint because it concerns the space-time in which transcendental subjects went from not-taking-place to taking-place and hence concerns the space-time anterior to spatiotemporal forms of representation’. The ancestral discloses ‘a temporality within which this relation is just one event among others, inscribed in an order of succession in which it is merely a stage, rather than an origin’. Brassier sums up the argument neatly when he writes that ‘ancestral time is indexed by objective phenomena such as this arche-fossil; but its existence does not depend upon those conditions of objectivation [i.e., transcendental conditions of experience] upon which knowledge of the arche-fossil depends because it [ancestral time] determines those conditions of instantiation which determine conditions of objectivation’. We might say that insofar as the instantiation of the transcendental subject depends upon ancestral time (in order to emerge) then ancestral time does not depend on the transcendental subject; or that if the transcendental subject emerges and is extinguished in space-time, then space and time cannot be said to be merely our forms of intuition (and thus correlated with us) and not things in

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113 Brassier remarks that the turn to the body in post-Kantian phenomenology can be seen clearly in ‘Heidegger’s critique of the “worldless” or disembodied subject of classical transcendentalism’. ‘Post-Heideggerean philosophy’, continues Brassier, ‘engaged in an increasing “corporealization” of the transcendental’ seen most prominently in Merleau-Ponty’s advocacy of ‘the quasi-transcendental status of embodiment’ (2010, 57).

114 AF, 24.
115 Ibid., 26.
116 Ibid.
117 Ibid., 10.
118 Brassier, Nihil Unbound, 58.
themselves. Knowledge of the ancestral is, therefore, knowledge of that which is not dependent on or non-correlated with us. It is knowledge of things in themselves.

Despite noting its ingenuity, however, Brassier is unconvinced by Meillassoux’s argument. Brassier’s critique begins by highlighting that Meillassoux’s argument for the logical priority of ancestral time over correlational time is actually predicated on an empirical claim. Specifically, it is predicated on the claim that it is a fact that the taking place of the transcendental required a body and that bodies (life forms), therefore, had to first emerge (and may not have emerged) from within a non-correlational time. In this way, as we have seen, correlational time (or what Brassier refers to as ‘anthropomorphic time’) is dependent on ancestral (or cosmological) time, whereas cosmological time is not dependent on anthropomorphic time. It is this distinction or asymmetry that underpins Meillassoux’s claim that ancestral time is logically anterior to correlational time. However, Brassier notes that by Meillassoux’s own admission, ancestral time is not a logical or necessary condition for correlationism because ‘there is no a priori reason why the existence of mind, and hence of correlation, could not happen to be coextensive with the existence of the universe’. The upshot, Brassier claims, is that ‘the asymmetry [between ancestral time and correlational time] to which … [Meillassoux] appeals … is a function of empirical fact’. The virtue of this critique is straightforward: if Meillassoux is unable to demonstrate that purportedly non-correlational or non-anthropomorphic time is in fact a logical requirement of the possibility of correlational or anthropomorphic time, then there is no a priori prohibition that would prevent the correlationist from holding that scientific accounts regarding ancestral events are indeed correlated with our experiential frameworks. Moreover, according to Brassier, insofar as Meillassoux’s appeal to ‘the (empirical) fact that cosmological time preceded anthropomorphic time and will presumably succeed it’ is tied to a chronological framework (required to make

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119 Ibid.
120 Ibid., 116. Brassier continues: ‘Indeed, this is precisely the claim of Hegelianism, which construes mind or Geist as a self-relating negativity already inherent in material reality.’ Brassier references page 161 of the French edition of After Finitude to support his claim that Meillassoux acknowledges that ancestral time is not a logical or necessary condition of correlationism. There we find a passage which in the English translation (on page 116) reads as follows: ‘…we cannot prove that dia-chronic events could not have been the correlates of a non-human relation to their occurrence (i.e., we cannot prove that they were not witnessed by a god or by a living creature’). Not only does Meillassoux concede that it is simply an empirical, contingent fact that ancestral time preceded correlational time, but also, and as we shall see in Chapter 6, his assertion of absolute contingency entails that chronology (and the arrow of time in general) might change.
121 Ibid., 58.
sense of relational terms such as “past”, “present” and “future”, as well as the terms “anteriority” and “posteriority”) it is vulnerable to ‘[a] simple change in the framework which determines chronology’. The simple change in framework Brassier has in mind is ‘the Einstein-Minkowski conception of four-dimensional space-time’, in which space and time are unified. When chronology is viewed according to this alternative framework, the correlationist has the means to ‘dissolve the alleged incommensurability between ancestral and anthropomorphomic time, thereby bridging the conceptual abyss which is supposed to separate anteriority from spatiotemporal distance’. When time and space are construed according to the model of four-dimensional space-time, wherein space and time are unified (as opposed to a Newtonian and Euclidean cosmological model for which spacial dimensions are a backdrop to objects and time flows uniformly and constantly) the correlationist can ‘convert the supposedly absolute anteriority attributed to the ancestral realm into an anteriority which is merely “for us”, not “in itself”’. The correlationist can simply claim that insofar as the spatiotemporal

122 Ibid., 59.
123 Ibid., 58.
124 Ibid.
125 Ibid., 59. To be a little more precise: Newton founded classical mechanics on the view that space and time are distinct and absolute background frameworks. In this way, space is a three dimensional container into which objects can be placed and in which they move. Time is separate from space and flows like a river without regard to physical objects in space. On Newton’s view, the rate of time is constant – it can neither speed up nor slow down and flows uniformly throughout the universe. Einstein-Minkowski four-dimensional space-time demonstrates that time cannot be separated from the three dimensions of space. Unlike the Newtonian view of separate and absolute space and time, this conception of space-time is famously hard to picture. One way to understand that space and time are inseparable in the four-dimensional view of space-time is to consider one of the consequences of Einstein’s theory of special relativity. In that theory what counts as simultaneous events is dependent on an inertial reference frame, i.e., the motion of an observer. When two events are separated in space, the motion of an observer (or reference frame) through space will determine the sequence of the events (relative to the observer). Thus, the simultaneity of events is relative. This means that events that occur simultaneously in two locations in one reference frame may occur non-simultaneously in another reference frame. Indeed, depending on the reference frame used, it is equally possible to claim that events A and B are simultaneous, that event A occurs before event B, or even that event B occurs before event A. According to special relativity, what counts as objective time sequence, as past, present and future, will dependent on an inertial reference frame. In short, special relativity entails that without reference to a frame, there is no fixed time interval, duration or sequence of events. For more on the relationship between special relativity and the relativity of simultaneity see Katherine Hawley (2012).

Minkowski’s innovation was to represent Einstein’s theory of special relativity geometrically. This meant viewing time as a dimension, like spatial dimensions. In this model, time does not unfold or flow: rather, an object moves through time, much as it moves through space. To be clearer still, an object moves through the four dimensions of space-time. Arguably the most philosophically challenging implication of Minkowski’s conception of space-time is the fact that in order to render time a complete and given dimension (like the other three dimensions) it represents the universe as a static block in which all time and events are given. The upshot is that, conceived in their four dimensions, all physical entities can be understood as world-lines moving through and slicing up space-time in particular ways. Thus, the way in which the universe and the events therein are experienced by humans is dependent on the particular way in which we slice up or slice through space-time. At the heart of the volume of essays Relativity and the Dimensionality of the World, (2008, ed. Petkov) is the question of whether four-dimensional
framework used by scientists to provide a chronological account of the universe and the events therein is tied to the spatiotemporal framework through which we experience the world, then scientific accounts regarding ancestral events are indeed correlated with our experiential frameworks. Thus we cannot conclude that ancestral statements tied to chronology can inform us only of the universe as it is in itself. And this remains true regardless of what scientists take to be the meaning of ancestral statements, or indeed statements about contemporary events. Brassier’s most straightforward critique, however, is simply that it is not at all obvious why the ancestral poses a unique problem for correlationism. ‘For surely’, Brassier writes, ‘it is not just ancestral phenomena which challenge [correlationism] … but simply the reality described by the modern natural sciences tout court’. Science informs us of physical processes (such as ‘plate tectonics, thermonuclear fusion, and galactic expansion’) that exist ‘quite independently of any relationship we may happen to have to them’ and the mere fact of their contemporaneity ‘with the existence of consciousness…is quite irrelevant’. So, despite demonstrating that correlationist rejoinders can be mounted against ancestral claims, Brassier holds that there is no requirement to privilege ancestrality as the unique problem for correlationism; scientific knowledge of physical processes informs us that correlationism is prima facie incompatible with scientific claims. Nonetheless, Brassier concedes that, insofar as robust correlationist critique and rejoinders can be marshalled against straightforwardly realist interpretations of scientific claims (whether they pertain to ancestrality or to physical processes), ‘Meillassoux is right to insist that it is necessary to pass through correlationism in order to overcome it.’

**Brassier’s Entropic Absolute: The End of Matter, Thought and Time**

Although Brassier’s introduction of four-dimensional space-time time serves as a means of demonstrating that a critique of correlationism on the basis of ancestrality is inadequate to its task (because correlationist rejoinders to ancestral claims are straightforward when chronology is understood as nested within a non-chronological spatiotemporal framework) he nonetheless

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126 It is, however, not at all clear what the correlationist would make of Einstein-Minkowski four-dimensional space-time. Is this four-dimensional space-time “for us”?  
128 Graham Harman (2015, 44–45) develops a similar critique.  
129 Brassier, *Nihil Unbound*, 94.
follows Meillassoux’s approach to overcoming correlationism via the identification of an absolute time which cannot be conceived as correlated with transcendental subjects, or “for us”. For Brassier, whereas the ancestral poses no particular problem to the correlationist or anthropocentric philosopher, the extinction of all life entailed by the heat death of the universe cannot be recuperated into a correlational framework. Brassier writes that, unlike ancestral anteriority [which] can too easily be converted into anteriority for us … the posteriority of extinction indexes a physical annihilation which no amount of chronological tinkering can transform into a correlate “for us”, because no matter how proximal or how distal the position allocated to it in space-time, it has already cancelled the sufficiency of the correlation. What defies correlation is the thought that ‘after the sun’s death, there will be no thought left to know its death took place’.131

Whereas the relationship between ancestral and anthropomorphic time ‘is a function of chronology’ (based on ‘the empirical assumption that the former preceded and will succeed the latter’), for Brassier, although the heat death of the universe will occur at a time in the future, that extinction is not chronological because it indexes ‘the extinction of space-time’ itself.132 Indeed, according to Brassier, this extinction of space-time entails the end of matter (as it decomposes into energy) and thought.133 For Brassier, the extinction of space-time does the work that

\[^{130}\text{Brassier explains that }\text{the earth will be incinerated by the sun 4 billion years hence; all the stars in the universe will stop shining in 100 trillion years; and eventually, one trillion, trillion, trillion years from now, all matter in the cosmos will disintegrate} (2010, 49).\]

\[^{131}\text{Ibid., 229. The nested quotation is from Jean-François Lyotard’s, }\text{The Inhuman: Reflections on Time} (1998), 9.\]

\[^{132}\text{Brassier, }\text{Nihil Unbound}, 230.\]

\[^{133}\text{I should clarify why the heat death of the universe would result in the end of matter, thought and time. The heat death of the universe is the result of the laws of thermodynamics. While the first law of thermodynamics holds that energy is neither created nor destroyed, the second law (in its early formulation) holds that usable energy is dissipated as heat flows from warmer to cooler bodies. In short, the second law of thermodynamics holds that energy will flow from object to object, area to area, until it is evenly spread. Another way of putting this is that the level of disorder (or entropy) in the universe is steadily increasing. The heat death of the universe will occur when the universe has reached a state of maximum entropy. This happens when all available energy has moved to places of less energy. Since heat ceases to flow, no more work can be extracted from the universe. The second law of thermodynamics entails an arrow or direction of time because entropy increases and (in an isolated system) does not decrease. Spilled liquids do not un-spill themselves, broken objects do not un-break themselves and we do not grow younger. From this perspective, entropy is one means of understanding the movement from past to future. According to the second law of thermodynamics the heat death of the universe is a state where entropy can no longer increase. It is the result of maximum entropy, a state of thermal equilibrium, and thus an end of thermodynamic work and with that the end of the thermodynamic arrow of time. Brassier’s description of the heat death of the universe is particularly evocative.}\]

Every star in the universe will have burnt out, plunging the cosmos into a state of absolute darkness and leaving behind nothing but spent husks of collapsed matter. All free matter, whether on planetary surfaces or in interstellar space, will have decayed, eradicating any remnants of life based in protons and chemistry, and erasing every vestige of sentience – irrespective of its physical basis. Finally, in a state cosmologists call ‘asymptopia’, the stellar corpses littering the empty universe will evaporate into a brief
ancestrality cannot do in Meillassoux’s argument, because we know that thought will suffer the same extinction as matter. Thus, whenever it occurs, the extinction of time in the heat death of the universe demonstrates that thought is another perishable object in the universe. Whereas ancestrality indexes a time before thought but leaves correlationism unimpaired (because ancestrality can be retroactively conceived under a correlationist framework), for Brassier, the inexorable extinction of thought undermines the priority of thought, unambiguously demonstrating that possible thought is underpinned by extra-mental, material conditions. Brassier’s argument turns on demonstrating that the extinction of thought undermines the correlationist claim that being is constituted as the necessary correlate of thought: that being is being “for us”. Brassier explains that

[the extinction of thought] implies an exteriority which … externalizes the internalization of exteriority [i.e., the correlationist exteriority] … extinction turns thinking inside out, objectifying it as a perishable thing in the world like any other (and no longer the imperishable condition of perishing). This is an externalization that cannot be appropriated by thought… it indexes the autonomy of the object in its capacity to transform thought itself into a thing. In this regard, extinction is a symptom of the posteriority which is the direct counterpart to… ancestrality… [N]o matter how proximal or how distal the position allocated to it in space-time, it has already cancelled the sufficiency of the correlation. What defies correlation is the thought of extinction … it undoes the correlation… because it turns the absence of correlation … into an object of thought, but one which transforms thought itself into an object … This is why [extinction] represents an objectification of thought, but one wherein the thought of the object is reversed by the object itself, rather than by the thought of the object. For the difference between the thought of the object and the object itself is no longer a function of thought … Thus, the object’s difference from the concept is given (‘without givenness’, which is to say, without-correlation) in such a way as to obviate the need for an account of the nature or genesis of this difference.134

For Brassier, then, the thought of extinction undermines correlationism because it demonstrates that thought is conditioned by a reality existing independently of the correlation. This is not a correlationist exteriority, because it is the thought of that which is in the absence of a correlation between thought and object. The heat death of the universe will extinguish thought as just one more ‘perishable thing in the world’. Thus, the posteriority of thought

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134 Brassier, Nihil Unbound, 229.
already cancel[s] the sufficiency of the correlation’ because it demonstrates that the object is not ‘a function of thought’ but thought is a function of the object (as it is not a correlate of thought). For Brassier, the thought of the extinction of thought (along with everything else except energy) in the heat death of the universe underpins the transcendental realist thesis that it is not ‘thought that determines the object, whether through representation or intuition, but rather the object that seizes thought and forces it to think it, or better, according to it’.135 In short, because we know that the entropic heat death of the universe will end matter, thought and time, we can demonstrate that possible thought is underpinned by material conditions that cannot be understood as a correlate of thought.136

Brassier’s critique of Meillassoux’s claim that correlationism and ancestral claims are incompatible is compelling. First, Brassier demonstrates that Meillassoux has not established that ancestral time is a logical condition of correlational time; he has only highlighted the empirical fact that the human mind is incarnated. Second, he argues that because Meillassoux’s argument depends on a linear and chronological conception of time, it is subject to the correlationist rejoinder that linear and chronological time, is time “for us”. Once we concede that other spatiotemporal frameworks are ontologically possible, then the correlationist need not accept that the ancestral is anything other than correlated with our spatiotemporal framework. Brassier’s example of an alternative spatiotemporal framework, ‘the Einstein-Minkowski conception of four-dimensional space-time’, demonstrates not only that Meillassoux is wrong to claim that spatial distance and temporal distance are fundamentally different (and, hence, that the former but not the latter can be incorporated into the correlationist framework), but also that a chronological framework wherein time flows from

135 Ibid., 149.
136 I take it that neither Brassier nor physicists concerned with entropy and cosmology are claiming that a state of maximum entropy in the universe would entail its ceasing to exist, even if the notion of its heat death might suggest that absurdity. Similarly, we should note that the law of conservation of mass (often expressed in the claim that matter can be neither destroyed nor created) is now referred to as the law of conservation of mass-energy because (as Einstein’s theory of relativity demonstrates) mass and energy are inter-convertible. It is also worth noting here that in his later work Brassier’s approach shifts the burden of proof to the correlationist who would rule out knowledge of things in themselves on the basis of the epistemological claim that knowledge is the product of thought. Having rejected the correlationist circle argument, Brassier more explicitly draws on Wilfred Sellars’ critique of the given (“the myth of the given”) and his distinction between manifest and scientific images in an effort to develop an account of the way in which ‘conceptual rationality [can] forge the explanatory bridge from thought to being’ (2011, 47). In so doing Brassier aims to shore up the transcendental realist thesis according to which ‘[w]e gain access to the structure of reality via a machinery of conception which extracts intelligible indices from a world that is not designed to be intelligible and is not originally infused with meaning’ (2011, 47).
past to future can be construed as anthropomorphic time, i.e., time “for us”.

As we have seen, despite this critique, Brassier follows Meillassoux’s approach to overcoming correlationism via the identification of an absolute time (an end time, really) that is immune to correlationist rejoinders. Brassier argues that the heat death of the universe cannot be recouped for the correlationist framework because it demonstrates that our thought, and that which is “for us”, is dependent on physical processes that will put an end to matter, thought and time. The thought of this end of thought is the thought of the end of the correlate between being and thought: ‘it turns thought inside out’ by revealing that thought, like everything else, owes its existence to physical processes. In this way, Brassier hopes to establish the transcendental realist thesis that the entities and mechanisms discovered by science inform us of the world as it is in itself.

Although Kant’s critique of transcendental realism features prominently in subsequent chapters, I do not engage with Brassier’s particular conception of transcendental realism here. It seems to me, however, that there are two related problems with Brassier’s argument. The first concerns the question of whether the thermodynamic arrow of time can be squared with the relativistic conception of four-dimensional space-time. On the one hand, the former principle holds that the entropic flow of energy functions as an arrow of time – an asymmetric physical law according to which entropy can increase but not decrease. On the other hand, the latter conception of the universe implies that the sequence of events is relative to the particular curve or slicing of space-time of an object in motion and, therefore, relative to its inertial reference frame. Thus, as Ladyman and Ross put it: ‘Even if thermodynamics seems to support the arrow of time, it is deeply puzzling how this can be compatible with an underlying physics that is time-symmetric.’

The issue here is simply that Brassier invokes both Einstein–Minkowski space-time (in his critique of Meillassoux’s view that ancestry indexes a time that cannot be incorporated in to anthropomorphic or correlationist time) and the entropic heat

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137 The roots of Brassier’s conception of transcendental realism (at least in Nihil Unbound) seem to lie in his reading of François Laruelle’s (non) philosophy. For Laruelle, the real is not only immanent in all philosophical systems and all thought, but it is that which in the last instance determines thought, consciousness and everything else. For more on Laruelle see: Chapter 5 of Brassier’s Nihil Unbound; Laruelle (2013); and John Mullarkey and Anthony Paul Smith (2012).

death of the universe (as his own paradigm of absolute time). Although there are many physicists and philosophers who maintain that the two conceptions are compatible, the long-standing question of whether, and to what extent, they can be reconciled (let alone established) is by no means settled.\textsuperscript{139} While Brassier is not required to engage in a discussion of the consistency of these two principles in his critique of Meillassoux’s ancestral argument, that critique would benefit from some engagement with the issue, if only to shore up his claim that entropy would indeed annihilate time as such, and not only correlational time.\textsuperscript{140} A more

\begin{quote}
139 Indeed, the issue stretches back to Parmenides and Heraclitus. Arthur Eddington’s satirical approach to the conflict between the block universe and entropic arrow of time is worth quoting:

\begin{quote}
When you say to yourself, ‘Every day I grow better and better,’ science churlishly replies – ‘I see no sign of it. I see you extended as a four-dimensional worm in space-time; and, although goodness is not strictly within my province, I will grant that one end of you is better than the other. But whether you grow better or worse depends on which way up I hold you. There is in your consciousness an idea of growth or “becoming”, which, if it is not illusory, implies that you have a label “This side up.” I have searched for such a label all through the physical world and can find no trace of it, so I strongly suspect that the label is non-existent in the world of reality.’
\end{quote}

That is the reply of science comprised in primary law. Taking account of secondary law, the reply is modified a little, though it is still none too gracious – ‘I have looked again and, in the course of studying a property called entropy, I find that the physical world is marked with an arrow which may possibly be intended to indicate which way up it should be regarded. With that orientation I find that you really do grow better. Or, to speak precisely, your good end is in the part of the world with the most entropy and your bad end is in the part with least. Why this arrangement should be considered more creditable than that of your neighbor who has his good and bad ends the other way around, I cannot imagine’ (1948, 44).
\end{quote}

140 It is worth noting that there is a wide range of respectable contemporary theories about the ultimate fate of the universe, and it is far from obvious that its heat death is inevitable. I cannot survey the range of theories or their technical details here: dozens of books and hundreds of technical articles on modern cosmology and the fate of the universe are published by reputable scientists every year. For cutting-edge theories on the fate of the universe, see, for example, Roger Penrose (2012), and Lawrence M. Krauss and Glenn D. Starkman (2000). For a comprehensive discussion of different conceptions of time in contemporary physics, see Laura Mersini-Houghton and Rüdiger Vaas (2014). Finally, Walter Gandy’s reflection on what, if anything, can be made of the 150-year old thesis that the universe will end in heat death is an insightful reminder of the importance of scientific scepticism:

\begin{quote}
Our cosmological outlook has changed considerably in a hundred years, but both philosophers (e.g., Price, 1996) and scientists (e.g., Davies, 1975; Penrose, 1989) continue to proffer an explanation for the Second Law in terms of time asymmetry in the universe, or vice versa. In this modern scenario, the universe is thought to have begun in a uniform state of very low entropy, considered so because it would be in opposition to the purely attractive gravitational interaction. Pondering the mystery of time asymmetry is indeed a worthy pursuit, but we find it quite difficult to relate this apparent feature of the universe to our local observations of irreversibility. It is rather presumptuous to speak of the entropy of a universe about which we still understand so little, and we wonder how one might define thermodynamic entropy for a universe and its major constituents that have never been in equilibrium in their entire existence. Is the Big Bang a reproducible process? On a more prosaic level, we have no idea how to envision, let alone calculate, the entropy of a worm! For these reasons we decline to speculate here on the relation of entropy to the long-term fate of the universe and whether or not it will run down and burn out (2012, 151).
\end{quote}
fundamental issue, however, concerns the question of the extent to which knowledge of the extinction of thought in the heat death of the universe breaches correlationism. Brassier’s target is most clearly the post-Kantian correlationist view that being is a correlate of thought, and that in the absence of thought there is no being. As we have seen, although the strong correlationist does not think that objects are ontically dependent on mind, they do hold that what it is for an object to be, is for it to be “for us”, and, therefore, dependent on the existence of consciousness. Brassier argues that because we know that the end of thought is dependent on processes that cannot be construed as correlates of thought (because the end of thought cannot be the end of thought for thought and the end of time cannot be the end of time “for us”) then the strong correlationist view that being requires, or is dependent on, thought is clearly false. What is less clear, however, is whether that knowledge overcomes Kant’s correlationism. Is knowledge of the material processes upon which thought depends, or knowledge that all thought will come to an end in the heat death of the universe, incompatible with Kant’s transcendental idealism? To answer that question I turn to Kant’s theory of knowledge and in particular the way in which our sensation, understanding and reason combine to extend our understanding of the universe far beyond direct empirical observation.

Kant on Reason’s Role in Scientific Enquiry

Here I argue that Hallward is correct about Kant: nothing in Kant’s transcendental idealism obviously precludes the generation of knowledge claims about that which is not given in experience or even that which could not be actually given in experience because it concerns that which is anterior or posterior to life. Kant is clear that although our forms of intuition

Indeed, it is worth noting the extent to which Kant’s scientific writings address questions of the nature of the universe prior to the advent of consciousness. Of particular note is Kant’s Universal Natural History and the Theory of the Heavens (2012 [1755]) in which he develops an account of the formation of the universe that has come to be termed “the nebular hypothesis”. Kant postulates that the chaotically dispersed material of the early universe was set in motion and drawn into larger bodies through the mechanics of attraction (gravity) and repulsion (essentially particles rebounding off other particles). According to Kant, the effect of these forces on matter was the emergence of concentrated accreted masses surrounded by spinning particle clouds. Kant not only claimed that this process formed planets, stars and solar systems, but he also speculated that solar systems orbit a common galactic centre. Indeed, he conjectured that the Milky Way is but one of many similarly constituted galaxies that form an immense system of galaxies revolving around the gravitational centre of the universe [despite noting that ‘in an infinite space, no point can properly have the prerogative of being called the centre point’ (2012, I: 312, 265)]. Kant’s nebular hypothesis was proved substantially correct by subsequent developments (first by Laplace and then C. F. V. Weizsäcker and J. G. Kuiper in 1944). In his detailed account of Kant’s theory of the formation of the cosmos in relation to subsequent developments of the nebular hypothesis Martin Schönfeld (2000, 112–117) notes that ‘the claim that individual galaxies, including the Milky Way, are in the grip of overarching
ultimately restrict possible knowledge of things as they are in themselves, we are well equipped to draw inferences from experience, and to postulate and test natural laws whose application and implications extend far beyond the evidence of our senses and the existence of human beings. For Kant, our capacity to generate a scientific understanding of nature is ultimately predicated on the interaction between our faculties of mind and the evidence of the senses. Above all, it is reason’s drive to systematise the judgments of experience into a unified whole that underpins scientific endeavour and the extension of our knowledge beyond the confines of what is immediately (or even possibly) given in human experience.

At the outset of Kant’s treatment of reason in the Transcendental Dialectic, he explains that ‘[a]ll our cognition starts from the senses, goes from there to the understanding, and ends with reason, beyond which there is nothing higher in us to work on the matter of intuition and bring it under the highest unity of thinking.’142 This summary articulates an isomorphic relationship between the material of sensation and the understanding on the one hand, and the understanding and reason on the other. Whereas the function of the understanding brings the manifold of sensory material (pre-ordered by the forms of intuition) under the unity of apperception through the pure categories of the understanding, the function of reason unifies and integrates judgments (the products of the understanding) by bringing them into a coherent system of knowledge.143 Although Kant famously curtails reason’s ambit by denying that it is capable of providing *a priori* knowledge of things in themselves, he argues that its drive to unify, organise and systematise judgments is essential to the formation of ideas and hence to the generation and organisation of knowledge. In the Appendix to the Transcendental Dialectic, Kant sets out three regulative ideas of reason and the means by which they are employed in all empirical knowledge and, in particular, in scientific cognition of nature.

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142 CPR, A298/B355, 387.
143 Ibid., B132, 246. Kant’s theory of knowledge is a central feature of Chapters 3, 5 and 6.
Reason thus prepares the field for understanding: 1. by a principle of **sameness of kind** in the manifold under higher genera, 2. by a principle of the **variety** of what is same in kind under lower species; and in order to complete the systematic unity it adds 3. still another law of the **affinity** of all concepts, which offers a continuous transition from every species to every other through a graduated increase of varieties. We can call these the principles of the **homogeneity**, **specification** and **continuity** of forms.\(^{144}\)

Insofar as these regulative ideas of reason function as presuppositions about nature, they orientate and regulate empirical enquiry. The first is the assumption that nature exhibits homogeneity, i.e., an underlying unity or sameness. The second runs in the other direction: it is the assumption that things can be divided into a variety of specifiable sub-species within generic kinds. The third combines the two principles: it is the assumption of the unity in diversity of empirical phenomena and natural forces through continuous gradations. These general principles function as ‘transcendental presupposition[s]’ expressing aspects of the idea of the complete systematic unity which reason compels us to find in nature.\(^{145}\)

Kant provides an extended astronomical example of how these regulative ideas of reason can be used to guide scientific practice:

Reason presupposes those cognitions of the understanding which are first applied to experience, and seeks the unity of these cognitions in accordance with ideas that go much further than experience can reach. The affinity of the manifold, without detriment to its variety, under a principle of unity, concerns not merely the things, but even more the mere properties and powers of things. Hence if, e.g., the course of the planets is given to us as circular through a (still not fully corrected) experience, and we find variations, then we suppose these variations to consist in an orbit that can deviate from the circle through each of an infinity of intermediate degrees according to constant laws; i.e., we suppose that the movements of the planets that are not a circle will more or less approximate to its properties, and then we come upon the ellipse. The comets show an even greater variety in their paths, since (as far as observation reaches) they do not ever return in a circle; yet we guess at a parabolic course for them, since it is still akin to the ellipse and, if the major axis of the latter is very long, it cannot be distinguished from it in all our observations. Thus under the guidance of those principles we come to a unity of genera in the forms of these paths, but thereby also further to unity in the cause of all the laws of this motion (gravitation); from there we extend our conquests, seeking to explain all variations and apparent deviations from those rules on the basis of the same principle; finally we even add on more than experience can ever confirm, namely in accordance with the rules of an affinity, even conceiving hyperbolical paths for comets in which these bodies leave our solar system.

\(^{144}\) CPR, A658/B686, 598.

\(^{145}\) Ibid., A651/B679, 595.
entirely and, going from sun to sun, unite in their course the most remote parts of a world system, which for us is unbounded yet connected through one and the same moving force.\textsuperscript{146}

Here, Kant sets out to demonstrate that the discovery of the rules governing the motion of bodies in the solar system and the trajectory of comets beyond our solar system was guided by reason’s regulative principles.\textsuperscript{147} When we discover that the orbits of some heavenly bodies are not circular we should attempt to find another hypothesis that is consistent with previous data and new observations. In order to unify observations under a general principle we systematically investigate curvilinear paths related to circles. In so doing, we identify the general concept of curve from which we unify and then differentiate the curves evident in the motion of the heavenly bodies we see. Thus, we find elliptical orbits of planets and parabolic and hyperbolic curves of comets through space. Next, Kant connects the classification of orbital motions with causal laws, specifically gravitation. Combined, the law of gravitation and a systematic understanding of curves allow us to extend the motion of bodies in space well beyond the limits of our observations. For example, we can then extend the motion of comets to chart their trajectories across other solar systems or determine their likely elliptical orbits.

These regulative principles of reason, alongside \textit{a priori} principles established in Kant’s Analogies (chiefly the law of causation, to which we turn in Chapter 2) play a fundamental role in Kant’s account of both experience and scientific knowledge in the \textit{Critique}.\textsuperscript{148} Understanding and reason furnish us with a battery of \textit{a priori} constitutive and regulative principles whose combination with the material of sensation offers a rich framework in which to engage in empirical and theoretical scientific enquiry that extends our understanding far beyond the immediate evidences of the senses. Indeed, it is this process that underpins the generation of new theories and concepts that guide empirical research. Thus, despite the considerable

\textsuperscript{146} Ibid., A663/B691, 601. Work on Kant’s philosophy of science is extensive and incorporates his entire corpus. See, for example: Gordon Brittan (2016); Michael Friedman (2015); Paul Guyer (2017); Robert Hannah (2009); and Eric Watkins (2001).

\textsuperscript{147} In fact, as Friedman notes, ‘Kant is here reconstructing the route by which Kepler first abandons the traditional idea of circular orbits in favour of elliptical orbits, Newton extends this idea to parabolic orbits for comets, Newton then arrives at the inverse square law of universal gravitation governing all the orbital motions in the solar system…and then Kant himself (together with Lambert) extends this Newtonian argument far beyond the bounds of the solar system to the cosmos as a whole’ (2015, 559).

\textsuperscript{148} Kant’s \textit{Critique of Judgment} and \textit{Metaphysical Foundations of Natural Science} fill out much of the provisional work on scientific enquiry set out in the first \textit{Critique}.
limitations of Hallward’s critique of Meillassoux’s argument, I think he is correct about this: nothing about ancestral claims – or, it seems to me, posterior claims – obviously constitutes ‘genuine conquest of the correlationist fortress’.149

Conclusion and Meillassoux’s Strategy

In this chapter I have introduced the central features of Meillassoux’s characterisation of correlationism and explained why he thinks correlationism is incompatible with the ancestral claims produced by modern empirical science. In so doing, I also introduced some of the rudiments of Kant’s transcendental idealism and tracked the way in which interpretations of his critique of ontology led to the development of (what Meillassoux characterises as) the strong correlationist thesis that ‘to be is to be a correlate’. This shift from Kant’s weak correlationism to post-Kantian ‘strong’ correlationism will be taken up again in Chapter 3. In addition to setting out the core features of correlationism in relationship to Kant’s transcendental idealism, the central aim of this chapter was to assess Meillassoux’s claim that correlationism is fundamentally incompatible with ancestral statements. As we have seen, despite the limitations of his critique of Meillassoux’s argument, Peter Hallward is correct to claim that ancestral statements pose little threat to Kant’s correlationism, even if science takes itself to be generating claims about things as they are in themselves. Meillassoux’s critique fairs somewhat better against the phenomenological variant of correlationism, for there is a prima facie tension between the claim that being is incoherent without mind when we have knowledge of a time prior to the emergence of the material conditions upon which the instantiation of mind depends. However, as Brassier argues, insofar as Meillassoux’s account of ancestral time remains chronological it can be incorporated into the framework of anthropomorphic or correlational time. As such, Brassier attempts to identify a time that cannot be incorporated into anthropomorphic time. He claims that the end of thought and time entailed by the

149 Hallward, ‘Anything Is Possible’, 138. Interestingly, had Meillassoux engaged more deeply with Kant’s transcendental idealism in relation to the claims of contemporary science, he may have noted that, although scientific knowledge of that which is anterior (or posterior) to thought (or the material conditions of its possibility) leave Kant’s correlationism unscathed, the empirical verification of non-chronological and relativistic accounts of time and space do pose a significant challenge to Kant’s critical idealism. The fact that we can directly observe time dilation and length contraction (as predicted by Einstein’s theory of special relativity) suggests that Kant is mistaken to suppose that our spatiotemporal forms of intuition limit both what can be known and what can be experienced. Unfortunately, an engagement with this problem is far beyond the scope of my argument here.
entropic heat death of the universe poses a more considerable challenge to correlationism because it demonstrates our capacity to think the end of possible thought in the end of time as just part and parcel of physical processes that cannot be construed as mind-dependent. Despite ambiguities in his account of time (and in particular the compatibility of four-dimensional space-time and the entropic arrow of time) Brassier’s non-correlational (end-) time represents a more robust challenge to the correlationist thesis that being depends on mind. Nonetheless, it is not obvious that knowledge of events either prior to the material instantiation of thought or subsequent to its inexorable material demise conflict with Kant’s correlationism. Kant’s theory of the relationship between our faculties of sensation, understanding and reason, demonstrate that although human knowledge cannot transcend appearances, this in no way prevents the extension of our knowledge far beyond direct sensory evidence. Despite its propensity to generate dogmatic illusion in its efforts to reach an unconditioned condition, reason is essential to both coherent experience (through the integration and unification of the understanding’s judgements) and the systematic enquiry into mind’s place in nature according to nature’s laws, history and future. As such, it is not obvious that ‘the problem of ancestrality succeeds in waking us from our correlationist slumber by enjoining us to reconcile thought and absolute’.\(^{150}\)

Before turning to Meillassoux’s immanent critique of correlationism in the next chapter, I need briefly to explain what he takes to be the implications of the incompatibility between correlationism and ancestral statements. As we have seen, for Meillassoux, insofar as there is no possible way to maintain that the true (or as he puts it, ‘literal’) meaning of ancestral statements is a relative or correlated meaning then ancestral statements are good candidates for ‘absolute knowledge’, which is to say, knowledge of the world as it is in itself. Meillassoux deploys the meaning of ancestral statements as a way of raising the general question of the conditions under which thought is able to ‘access an absolute, i.e., a being whose \textit{severance} (the original meaning of \textit{absolutus}) and whose separateness from thought is such that it presents itself to us as non-relative to us, and hence as capable of existing whether we exist or not.’\(^{151}\) Meillassoux restates the problem of ancestral claims in a more general form. ‘What’, he asks, ‘is

\(^{150}\) AF, 128.

\(^{151}\) Ibid.
the condition that legitimates science’s ancestral statements?" 152 Crucially, Meillassoux does not claim that establishing the incompatibility of the true meaning of science’s ancestral statements and correlationism undermines the argument upon which correlationism rests, even if it does demonstrate that its conclusion (that knowledge of things as they are in themselves is impossible) must be false. Rather, Meillassoux’s approach to this question begins by acceding to what he says is the realist meaning of ancestral statements and the force of correlationist argument. His strategy is to demonstrate that the only means by which to overcome the contradiction between correlationism and sciences’ ability to generate ancestral statements is to show that the ‘contradiction is merely apparent’.153 The difficulty with this, however, is that Meillassoux concedes that correlationist argument is ‘apparently unanswerable’.154 Which is why, he says, the ‘virtue of transcendentalism [i.e., correlationism], does not lie in rendering realism illusory, but rendering it astonishing, i.e., apparently unthinkable, yet true, and hence eminently problematic’.155 Although Meillassoux’s critique of correlationism begins with an effort to demonstrate that it is incompatible with ancestral claims, his solution rests on an immanent critique of correlationism. I turn to the groundwork of this immanent critique in the next chapter.

152 Ibid., 27.
153 Ibid.
154 Ibid. The reason correlationism is unanswerable, according to Meillassoux, is the correlationist circle argument. Unlike Meillassoux (and many others before him) I do not think Kant’s argument for why knowledge of things in themselves is impossible is predicated on the circle argument. As we shall see, Kant’s prohibition on knowing things as they are in themselves is not derived from any kind of prima facie contradiction entailed by thinking (or attempting to know) that which is not itself a thought. The difference between Meillassoux’s correlationist circle argument that prohibits knowledge of things as they are in themselves and the argument by which Kant generates that prohibition is that Kant draws the conclusion (that we cannot know things in themselves) after establishing the premise that we can know the world only according to our forms of intuition (i.e., considered as it appears). Kant’s conclusion that we cannot know things considered as they are in themselves follows inexorably from that premise. That is, once the premise that we can only know the world as it appears is established, the conclusion that we cannot know the world considered as it is in itself (or considered as it is does not appear) follows as a tautology. Whereas the correlationist circle argument falsely claims that knowledge of things in themselves is impossible simply because of the tautology that knowledge requires concepts or thought, Kant’s argument establishes that to know things in themselves is a contradiction in terms because, ex hypothesi, knowledge of the world is restricted to the world and its objects considered as appearances. The reason that Kant’s argument is sound (unlike the correlationist circle argument) will become clear when, in Chapter 3, I defend the epistemological reading of Kant’s transcendental idealism against, and in contrast to, the traditional metaphysical reading.
155AF, 27.
CHAPTER TWO:
GROUND CLEARING – THE ROAD TO SPECULATIVE MATERIALISM

Introduction

Although Meillassoux has not demonstrated that correlationism is incompatible with ancestral claims, let us recall the way in which he formulates the central question that emerges from that purported incompatibility. Meillassoux asks: ‘What is the condition that legitimates science’s ancestral statements?’ Insofar as he holds that the only legitimate meaning of ancestral statements (i.e., their “literal” meaning) ought to be unthinkable for the correlationist philosopher, he reframes his enquiry as an attempt to determine the possibility of ‘an absolute’ (by which he means that which is separate from or not correlated with us and, therefore, ‘capable of existing whether we exist or not’).\(^{156}\)

This chapter concerns the groundwork of Meillassoux’s approach to establishing the possibility of such an absolute. He begins by reframing ancestral statements through the lens of the distinction between primary and secondary qualities. Insofar as the notion of primary qualities indexes the properties of objects that exist independently of our sensations it serves as a model for both the notion of things in themselves and the meaning of ancestral statements. Meillassoux then follows the form of Descartes’ argument in Meditations to claim that we must establish a ‘primary absolute’ (akin in that respect to Descartes’ God) capable of overcoming (correlationist) scepticism in order to provide a philosophical ground that might underwrite the possibility of knowing primary qualities, i.e., qualities or properties of things in themselves. After explaining the argument by which Descartes attempts to prove the existence of an external, material world via an ontological argument for God, I follow Meillassoux’s critique of that argument. It is here that Meillassoux first introduces the distinction between weak and strong versions of correlationism. He argues that the strong correlationist would simply dismiss Descartes’ claim to know the absolute (that which is independent of the correlationist cogito) because such an absolute is always “for us” (and, therefore, not absolute). In contrast, he claims that Kant’s (weak) correlationism must tackle Descartes’ argument on its own terms because, unlike the strong variant, Kant’s correlationism does not hold that an absolute (i.e, a

\(^{156}\) AF, 28.
thing in itself that is not a thing in itself “for us”) is unthinkable. According to Meillassoux, Kant must refute Descartes’ ontological argument because he holds that the principle of contradiction (the PNC) is itself absolute, pertaining to both appearances and things in themselves.

I argue that it is far from obvious that Kant takes the PNC to pertain to things in themselves, and I suggest that Meillassoux draws that conclusion from an assumptive and problematic interpretation of Kant’s claims about things in themselves. Because Meillassoux means to break with correlationism, he marshals a Humean and Kantian critique of the ontological argument to demonstrate that if he is to follow the form of Descartes’ argument, to establish an absolute (e.g., God) that might justify the claim that we can know primary qualities of things in themselves, he can deploy neither an ontological argument nor the principle of sufficient reason (PSR). He argues that in the absence of an ontological argument the PSR collapses because it has no means to halt the infinite regress to which it gives rise. Although Meillassoux’s argument to this effect is rapid, taking up little more than a few paragraphs in After Finitude, it is central to his approach; it not only establishes the form of the absolute he seeks to determine, but in so doing it also underpins his radical conclusion that all things are necessarily contingent. This is why I engage in a careful analysis of the tenability of Meillassoux’s claim that the failure of the ontological argument sounds the death knell for the PSR through an examination of the ways in which the relationships between the ontological argument, the PSR, determinism (or necessitarianism) and the problem of an infinite regress of reasons have been treated by Spinoza, Leibniz and Kant. I conclude that Meillassoux’s claim that the PSR is untenable without an ontological argument is far from conclusive.

My treatment of Kant’s restricted version of the PSR demonstrates that the causal principle, according to which phenomena are governed by causal law, is entirely consistent with his refutation of the ontological argument. Following his rejection of the ontological argument and the PSR, Meillassoux claims that the absolute he seeks to establish can be neither a necessary entity nor begin with (nor harness) the PSR. After a brief introduction to Kant’s critique of reason’s drive to determine an unconditioned unity (i.e., the ideal version of the PSR) I conclude by setting the stage for Meillassoux’s attempt to locate this (non-metaphysical) absolute through his immanent critique of correlationism.
Back to Primary Qualities

At the outset of After Finitude Meillassoux claims that the notion of primary qualities should be reactivated in order to think the in-itself and return to the great outdoors. He deploys the notions of primary and secondary qualities in a standard manner: to mark the difference between the properties of objects that inhere in objects independently of sensation or observation and those properties that relate to and are in that respect dependent on sensation or observation. The sensation of pain, for example, is not in the knife that cuts me or the wax that burns me. Similarly, the taste of food does not appear to exist prior to ingestion by someone or something doing the tasting. Such affects or sensations clearly require a relationship with someone’s or something’s sensibility. If the observer (or more generally, the thing doing the sensing) is removed, the world appears to lose its visual, olfactory, tactile and sonorous qualities. i.e., it loses its sensory qualities. At the same time, however, it would seem absurd to claim that our sensations are somehow entirely independent of the things we sense. Unless we are all subject to the same remarkably consistent hallucinations, then it seems self-evident that such sensations would not exist without something giving rise to them. According to Meillassoux, the theory of secondary qualities constitutes a kind of proto-articulation of the basic philosophical coordinates of correlationism. ‘Whether it be affective or perceptual’, writes Meillassoux, ‘the sensible only exists as a relation: a relation between the world and the living creature I am’.\footnote{157}{AF, 2.} Indeed, he explains that ‘the sensible is neither “in me” in the manner of a dream nor simply “in the thing” in the manner of an intrinsic property: it is the very relation between the thing and I’.\footnote{158}{Ibid.} Although Meillassoux is exaggerating considerably when he claims that ‘[t]he theory of primary and secondary qualities seems to belong to an irredeemably obsolete philosophical past’, it is likely that philosophers today would not share Hume’s view that the distinction between primary and secondary qualities constitutes ‘the fundamental principle’ of ‘the modern philosophy’.\footnote{159}{Ibid.,1; David Hume, A Treatise of Human Nature, ed. L. A. Selby-Bigge and P. H. Nidditch (Oxford: Clarendon Press, 1978), 226.} Meillassoux contends that the notion of secondary qualities (in which experience of objects is considered as a relation to us) would be left largely unchallenged by contemporary philosophers because it coheres with the correlationist view that we cannot ascribe to the object without me (i.e., the thing in itself) the
qualities or properties that relate to our experience. In contrast, he claims that for the post-Kantian, critical thinker, the notion of primary qualities would seem to be the height of pre-critical philosophical naivety: ‘What decisively discredited the distinction between primary and secondary qualities’, claims Meillassoux, ‘is the very idea of such a distinction, i.e., the assumption that the … sensible properties could be restricted to the object’s sensible determinations, rather than extended to all its conceivable properties.’\footnote{AF, 2. This is at best a rather narrow account of the contemporary philosophical landscape. As we have seen, the question of whether or not reality is, and can be known to be, carved at particular joints, and the question of what if anything can be said about intrinsic (or primary) qualities remains a central philosophical concern. See Lawrence Nolan (2011).}\footnote{AF, 2.} He explains that the reason the distinction ‘is almost certain to appear insupportable to a contemporary philosopher’ is that it is predicated on a ‘claim that thought is capable of discriminating between those properties of the world which are a function of our relation to it, and those properties of the world as it is “in itself” subsisting indifferently of our relationship to it’.\footnote{Ibid, 4. In Miller’s translation of Hegel’s \textit{Phenomenology of Spirit}, the whole passage is put this way: ‘The object, it is true, seems only to be for consciousness in the way that consciousness knows it; it seems that consciousness cannot, as it were, get behind the object as it exists for consciousness so as to examine what the object is in itself, and hence, too, cannot test its own knowledge by that standard’ (2004, §85, 54).} As discussed in the previous chapter, the epistemological problem here is that in order for us to identify the primary qualities of an object (i.e., properties of objects as they are in themselves) thought would be required to somehow get beyond or outside itself in order to contrast the world as it appears to (and is thereby “for”) us, with how it is in itself. As we have seen, according to Meillassoux (and Berkeley) the problem with such an enterprise is that it is self-refuting: when we think about the world, or anything else, we can do so only in thought. In other words, and to quote Meillassoux quoting Hegel, ‘we cannot “creep up on” the object “from behind” so as to find out what it is in itself’.\footnote{Ibid, 5.}

Meillassoux argues that Kant’s critical revolution not only put paid to the real meaning of the distinction between secondary and primary qualities (wherein primary qualities index properties of things in themselves) but crucially also redefined objectivity.\footnote{Kant’s remark about secondary and primary qualities in the \textit{Prolegomena} demonstrates that he does not so much abandon the distinction as place it within the sphere of appearances – which is what one would expect. Kant writes: That one could, without detracting from the actual existence of outer things, say of a great many of their predicates: they belong not to these things in themselves, but only to their appearances and have no existence of their own outside our representation, is something that was generally accepted and acknowledged long before Locke’s time, though more commonly thereafter. To these predicates belong...} Objectivity for Kant is no
longer conceived in terms of a notion’s or representation’s identity, “adequation” or “resemblance” to an object supposedly subsisting “in itself”, since this “in itself” is inaccessible. Rather, in the Kantian framework, objectivity consists in the capacity for a representation to be universalised, to follow a rule, and thus, in principle at least, to be valid for all human beings. In the Prolegomena, Kant explains the distinction between subjective and objective judgments in the following terms:

Empirical judgments, insofar as they have objective validity, are judgments of experience; those, however, that are only subjectively valid I call mere judgments of perception. The latter do not require a pure concept of the understanding, but only the logical connection of perceptions in a thinking subject. But the former always demand, in addition to the representations of sensory intuition, special concepts originally generated in the understanding, which are precisely what make the judgment of experience objectively valid. All of our judgments are at first mere judgments of perception; they hold only for us, i.e., for our subject, and only afterwards do we give them a new relation, namely to an object, and intend that the judgment should also be valid at all times for us and for everyone else.

Meillassoux argues that the upshot of Kant’s distinction between subjective and objective judgments is that insofar as the latter are universal (i.e., rule governed) judgments they may belong to scientific discourse. And it is this, claims Meillassoux, that gives rise to the idea that objectivity consists in ‘intersubjectivity’ and ‘the consensus of a community’ rather than in warmth, color, taste, etc. That I, however, even beyond these, include (for weighty reasons) also among mere appearances the remaining qualities of bodies, which are called primarius: extension, place, and more generally space along with everything that depends on it (impenetrability or materiality, shape, etc.), is something against which not the least ground of uncertainty can be raised; and as little as someone can be called an idealist because he wants to admit colors as properties that attach not to the object in itself, but only to the sense of vision as modifications, just as little can my system be called idealist simply because I find that even more of, nay, all of the properties that make up the intuition of a body belong merely to its appearance: for the existence of the thing that appears is not thereby nullified, as with real idealism, but it is only shown that through the senses we cannot cognize it at all as it is in itself.

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164 AF, 4
165 Immanuel Kant, *Prolegomena to Any Future Metaphysics That Will Be Able to Come Forward as Science: With Selections from the Critique of Pure Reason*, ed. Gary Hatfield (New York: Cambridge University Press, 2008), §13, 4:298, 50. There is considerable scholarly debate about Kant’s distinction between subjective and objective judgments and what, if anything, makes one and not the other objective in the first place. This is compounded by the fact that his treatment of objective and subjective judgments varies substantially in different texts. The central puzzle, however, concerns the question of what if anything can be made of the notion of a subjective perception that still counts as a judgment. The question can be put this way: what is a judgment if is not organised by the categories of the understanding? See Brigitte Sassen (2008) for a discussion of this and other difficulties in Kant’s distinction between objective and subjective judgments.
‘adequation between the representations of a solitary subject and the thing itself’. He concludes that for philosophers in Kant’s wake, ‘scientific truth is no longer what conforms to an in-itself supposedly indifferent to the way in which it is given to the subject, but rather what is susceptible of being given as shared by a scientific community’.

**The Cartesian In-itself**

In *After Finitude*, Meillassoux defends a specific notion of primary qualities that he hopes to resurrect. He follows Descartes in identifying as primary ‘all those properties … which are … subject to geometrical proof’. In contrast to ‘the sensible [that] only exists as a subject’s relation to the world’, these (primary) qualities can be conceived of as ‘properties of the thing in itself as it is without me, as much as it is with me – properties of the in-itself’. His claim, and the thesis he wants to defend, is that ‘all those aspects of the object that can be formulated in mathematical terms can be meaningfully conceived as properties of the object in itself’. Unlike sensible qualities, ‘the mathematizable properties of the object’ are ‘exempt from the constraints’ of ‘a subject’s relation to the world’. They are ‘effectively in the object in the way in which I conceive them, whether I am in relation with this object or not’.

As I have indicated above, in order to specify the conditions under which to establish that mathematisable properties of objects provide knowledge of primary qualities (i.e., knowledge of the properties of things in themselves) Meillassoux turns to the form of Descartes’ proof of the existence of an external, material world that can be known according to clear and distinct procedures of mathematics and geometry. In particular, he turns to Descartes’ claim that the veracity of our mathematical and geometric understanding of the physical world is

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166 AF, 4.
167 Ibid.
168 Meillassoux lists a number of the properties Descartes says can be considered primary: ‘Length, width, movement, depth, figure, size’. In contrast to Descartes, however, and following Berkeley’s critique of primary qualities, Meillassoux precludes extension from this list, because, he says, extension is ‘indissociable from sensible representation: one cannot imagine an extension which would not be coloured, and hence which would not be associated with a secondary quality’ (AF, 2).
169 Ibid., 3.
170 Ibid.
171 Ibid.
172 Ibid.
underwritten by God's existence. Meillassoux's highly compressed account of Descartes’ argument in *Meditations* runs as follows:

1. I can prove the existence of a perfect, all-powerful God. We know that one of the three proofs for the existence of God put forward by Descartes in his *Meditations* is one that, since Kant, has come to be known as ‘the ontological proof’ (or argument). It proceeds by inferring God’s existence from his definition as an infinitely perfect being – since He is posited as perfect, and since existence is a perfection, God cannot but exist. Since he conceives of God as existing necessarily, whether I exist to think of Him or not, Descartes assures me of a possible access to an absolute reality – a Great Outdoors that is not a correlate of my thought.

2. Since this God is perfect, He cannot deceive me when I make proper use of my understanding; that is to say, when I reason through clear and distinct ideas.

3. It seems to me that there exist outside me bodies of which I possess a distinct idea when I attribute to them nothing but three-dimensional extension. Consequently, the latter must effectively exist outside me, for otherwise God would be deceitful, which is contrary to His nature.\(^\text{173}\)

Meillassoux then explains that ‘the nature of the procedure followed by Descartes, independently of its content … proceeds as follows’:

1. It establishes the existence of an absolute – a perfect God (or what we will call a ‘primary absolute’). 2. It derives from this primary absolute the absolute reach of mathematics (or what we will call a ‘derivative absolute’) by emphasizing that a perfect God would not deceive us. By ‘absolute reach’ we mean that any aspect of a body that can be thought mathematically (whether through arithmetic or geometry) can exist absolutely outside me.\(^\text{174}\)

Although Meillassoux is chiefly concerned with the form of Descartes’ argument, as opposed to its content, we should note that his reconstruction is ambiguous because it does not explain why Descartes thinks God necessarily exists. Meillassoux is correct to claim that Descartes rests his proof for the existence of a mind-independent world, and the veracity of our clear and distinct mathematical and geometrical knowledge about it, on an ontological (i.e., *a priori*) argument for the existence of God. However, Descartes’ claim that the existence of God can be inferred from 'his definition’ requires some clarification. As Meillassoux notes, Descartes claims that God is the idea of a being in possession of all perfections, and since perfection is existence then the idea or essence of God necessarily involves existence. The difficulty here is

\(^{173}\) Ibid., 29.
\(^{174}\) Ibid., 30.
passing from the idea or essence of God to the actual existence of God. Descartes registers this issue when he writes that ‘even if I can no more think of God without existence than I can think of a mountain without a valley, yet certainly, it does not follow from my thinking of a mountain as having a valley that any mountain exists in the world; similarly, from my thinking of God as existing, it does not seem to follow that God exists’. Descartes’ answer to this is clearly expressed in his reply to Johannes Caterus. After noting Caterus’ objection that ‘even if we are quite aware that existence belongs to God’s essence, we fail to conclude that God exists, because we do not know whether his essence is … true or merely a fiction created by ourselves’ Descartes explains that ‘we have to distinguish between possible and necessary existence, and to note that possible existence is contained in the concept or idea of all things that are clearly and distinctly understood, but that necessary existence is contained only in the idea of God’. So, for Descartes, necessary existence is uniquely part of the essence of God. Furthermore, as Bernard Williams explains, for Descartes, “necessary existence” does not mean, or just mean, “existence entailed by the concept of the thing”... [i]t means uncreated and eternal existence, the existence enjoyed by a thing of which it makes no sense to say that it has come to be or passed away'. So, for Descartes, God's existence is not simply inferred on account of his infinite perfection. Rather, his infinite perfection is inferred from the unique concept of God as something uncaused, and eternal i.e., as existing solely through itself without coming into existence. Crucially, unlike a modal logical notion of necessary existence as that which exists in all possible worlds, Descartes conceives of a necessity as that which exists by its own power. The central ambiguity in Meillassoux’s account is that he does not register that it is not infinite perfection as such that entails God’s necessary existence for Descartes. Instead, it is the specific notion of God’s perfection that entails necessary (i.e., eternal and uncaused) existence.

176 Ibid., 81.
177 Bernard Williams, *Descartes: The Project of Pure Enquiry* (London: Routledge Classics, 2015), 142. Williams’ point is that Descartes’ notion of necessary existence is different to the one expressed in modern modal logic terms.
178 The modal ontological argument for God’s existence has its roots in St. Anselm’s ontological argument. More recent proponents of Anselm’s ontological argument include Charles Hartshorne (1941), Norman Malcolm (1960) and Alvin Plantinga (2008).
179 This is not to say that Descartes thereby successfully addresses Caterus’ objection, as both Georges Dicker (2013, 250–253) and Bernard Williams (2015, 143) note. Dicker sums up the issue neatly: ‘just because one builds necessary existence [construed as that which is uncaused and eternal] into the concept of a supremely perfect being, it does not follow that anything answers to that concept’ (250).
Leaving aside the accuracy of Meillassoux’s reconstruction of Descartes’ argument in *Meditations*, we can turn to the lessons he takes from its form. The first lesson is central to Meillassoux’s approach. In order to breach correlationist (i.e., sceptical) argument and secure knowledge of an absolute (i.e., knowledge of something that is not a correlate of thought) Meillassoux will attempt to prove the necessary existence of an absolute. In addition to undermining correlationism, this ‘primary absolute’ would provide the grounds for a proof of the ‘absolute reach of mathematics’. As above, ‘[b]y “absolute reach”’, Meillassoux ‘mean[s] that any aspect of a body that can be thought mathematically (whether through arithmetic or geometry) can exist absolutely outside me’. Thus, for Meillassoux, establishing a primary absolute would not only overcome correlationist finitude, it would also underwrite the absolute (i.e., non-correlational) truth of our knowledge of primary qualities. In this sense, the “Great In-Itself”, or primary absolute, that Meillassoux seeks to establish is Cartesian, even though his approach relies on a refutation of Descartes’ ontological argument. Furthermore, and as Meillassoux notes at the outset of Chapter 3 of *After Finitude*, he also follows Descartes’ attempts to demonstrate that something other than the (correlationist) *cogito* can be known. In order to clarify the form his Cartesian argument must take, Meillassoux sets out to determine the barriers that would restrict possible knowledge of a necessary entity.

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Unfortunately Meillassoux says very little about the relationship between Descartes’ *cogito* and his use of the ontological argument. It would be useful to make the relationship explicit. Descartes’ theory of clear and distinct ideas, or the mark of truth, lies at the heart of his argument in *Meditations*. According to Descartes, whatever can be clearly and distinctly perceived to be contained in the idea of something is true of that thing. Descartes’ idea of himself as a thinking thing is made clear and distinct through the process of hyperbolic doubt. Thus, it becomes self-evident to Descartes that he is a thinking thing, and that insofar as he thinks, he exists. Descartes’ wax experiment is similarly aimed at determining a clear and distinct idea of body by rejecting that which can be doubted through the senses or the imagination. His conclusion is that the essence (or truth) of bodies is extension, which is a geometrical property. Although we have a clear and distinct idea of body and a clear and distinct idea of mind we do not yet know that these are in fact two separate substances. Moreover, while the existence of the external world remains in doubt, we cannot conclude that material bodies exist in the universe even if the idea of body is clear and distinct. The next step in Descartes’ argument is, therefore, aimed at establishing the existence of something other than the thing that he is. This is the problem Descartes’ ontological argument for God seeks to address. Having proved the existence of himself and God, Descartes argues that the source of sensations must be corporeal things. He concludes that corporeal things exist and can be known according to the procedures of mathematics:

I cannot see how, if they were in fact from some other source, it would be possible to think of him [God] except as a deceiver. And therefore bodily things exist. Perhaps, however, they do not all exist exactly as I apprehend them by the senses, since this sensory apprehension is very obscure and confused in many respects. But at least all those properties are in them that I clearly and distinctly understand: that is, all those, generally considered, that are included in the object of pure mathematics (2008, §80, 55).
Critique of the Ontological Argument

Meillassoux explains that ‘in order to bring out the content of [his] argument [he] must begin by explaining in what regard the … Cartesian argument is incapable of withstanding the correlationist critique’. Here, Meillassoux begins to draw the distinction between Kant’s weak correlationism and the strong model of correlationism that lies at the heart of his immanent critique of correlationism. Meillassoux does not provide a careful characterisation of these positions at this point in his argument but his approach to the respective treatments of Descartes’ argument serves as an introduction to the characteristics that mark out their central difference. Indeed, his brief introduction to the distinction not only sets up the strategy of the argument by which he hopes to overcome correlationism, but also reveals the extent to which his approach relies on a particular interpretation of Kant’s transcendental idealism.

According to Meillassoux, the strong correlationist approach to Descartes’ argument would enlist the so-called ‘circle argument’ and simply refuse the possibility that he could ‘access an absolute existence’ (i.e., something uncorrelated with us). In this way, the strong correlationist will simply reply that even if Descartes’ argument seems persuasive it must be fallacious. The strong correlationist will claim that even if an ontological argument can demonstrate that a being is absolutely necessary, so that its non-existence is contradictory, insofar as what counts as absolute is that which exists independently of us, then, following the circle argument, it cannot be absolute. Thus, for Meillassoux, the strong correlationist’s reply to Descartes’ ontological argument is that ‘because absolute necessity is always absolute necessity for us’ this means that ‘necessity is never absolute, but only ever for us’.

Unlike the strong correlationist (who can simply disagree that it is possible to ‘access’ something that is not correlated with us, irrespective of the argument upon which that claim is based) Meillassoux thinks that Kant must ‘demonstrate that there is no contradiction in maintaining that God does not exist’ because in the absence of such a demonstration ‘it would

181 AF, 30.
182 As I have indicated in the previous chapter, I turn to a careful assessment of the circle argument in the next chapter. Here, however, it will suffice to recall that the circle argument holds that we cannot think that which is not a correlate of thought, or “for us”, in some respect.
183 AF, 31. This amounts to the claim that “absolute” necessity is contingent (i.e., “for us”) and hence not, in fact, absolute.
be necessary [for Kant] to concede that Descartes has effectively attained an absolute'.

The reason for this, he says, is that Kant holds that the PNC has ‘an absolute ontological scope’, which is to say that it pertains to both possible thought and possible objects that do or could exist. In Meillassoux’s words, Kant ‘allows us the possibility of knowing a priori that a logical contradiction is absolutely impossible’. And it is for this reason that if Descartes can demonstrate that God’s non-existence is contradictory then Kant would have to acknowledge that Descartes ‘has demonstrated that it is possible to obtain positive knowledge of the thing-in-itself through the use of a logical principle alone’.

Before turning to Kant’s refutation of Descartes’ ontological argument I will briefly assess Meillassoux’s account of why Kant must tackle Descartes’ argument directly. In so doing I want to highlight a central issue; namely that Meillassoux simply assumes that Kant holds that the PNC has ‘an absolute ontological scope’. Meillassoux’s argument for why Kant holds that the PNC has ‘an absolute ontological scope’ is characteristically brief. He writes:

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\text{[A]lthough [Kant] maintains that the thing-in-itself is unknowable, he also maintains that it is thinkable. For Kant effectively allows us the possibility of knowing} \text{ a priori that a logical contradiction is absolutely impossible. Although we cannot apply categorical cognition to the thing-in-itself, the latter remains subject to the logical condition that is the prerequisite for all thought. Consequently, for Kant, the following two propositions have an absolute ontological scope:}
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1. The thing-in-itself is non-contradictory.
2. The thing-in-itself exists, otherwise there would be appearances without anything that appears, which for Kant is contradictory.

This is why it is imperative for Kant that Descartes’ thesis be refuted – for if it was contradictory for God not to exist, then by Kant’s own premises, it would also be absolutely necessary (and not just necessary for us) that God exist.

This argument is confusing and it is not clear how it might be reconstructed. Nonetheless, we can avoid such confusion by noting that however the argument is supposed to work it is

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184 Ibid. Again, by ‘attained an absolute’ Meillassoux means that one has grasped or knows that which is in itself, or that which exists independently of us.

185 Ibid.

186 Ibid.

187 Ibid.

188 AF, 31.
based on the assumption that Kant thinks the PNC has ‘an absolute ontological scope’. Now, Meillassoux is right to say that Kant holds that the thing in itself is thinkable. That is, for Kant (in contrast to Meillassoux’s characterisation of the strong correlationist position) thinking that which is not a correlate of thought (i.e., things in themselves) is not a contradiction in terms, even if we ‘cannot apply categorial cognition to the thing-in-itself’.\textsuperscript{190} It is also true, as Meillassoux says, that Kant claims that there cannot be appearances without anything that appears, and that, therefore, we must hold that there is something that exists that is not mere appearance.\textsuperscript{191} What is not obvious, however, is why any of this entails that Kant thinks that the PNC has ‘an absolute ontological scope’. It is true that Kant views the PNC as “absolute” insofar as it pertains to all judgments. Indeed, he explains that regardless of ‘the content of our cognition’ and ‘however [those cognitions] may be related to the object’, the ‘condition of all of our judgments whatsoever is that they do not contradict themselves’.\textsuperscript{192} But this is not at all to say that things in themselves are in fact non-contradictory, even if it is to say that things in themselves must be considered as non-contradictory insofar as they can be considered at all. In other words, although we can concede that for Kant the PNC pertains to any coherent claim that can be made regarding things in themselves (or anything else) it does not follow that the PNC has ‘an absolute ontological scope’. The fundamental issue here concerns the way in which Meillassoux understands Kant’s claims about things in themselves. Indeed, as we shall see, that issue lies at the heart of my appraisal of Meillassoux’s entire enterprise.\textsuperscript{193}

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\item Even if we disregard the content of the argument, its structure is opaque. For example, Meillassoux explains that Kant has to refute Descartes’ argument at the risk of contradicting his own premises. But it is not clear what Meillassoux takes to be ‘Kant’s own premises’. Are they sentences 1 and 2 or the claim that the PNC has an absolute ontological scope? Also, it is not clear whether Meillassoux is arguing that the absolute ontological scope of the PNC is the premise from which claims 1 and 2 follow, or the conclusion that follows from these claims.\textsuperscript{190} In the next chapter we see that Meillassoux’s characterisation of the strong correlationist reply to Descartes’ argument (that the ‘absolute’ is a contradiction in terms) ultimately depends on the so-called correlationist circle argument.
\item Kant puts the claim this way: ‘even if we cannot cognize these same objects as things in themselves, we at least must be able to think them as things in themselves. For otherwise there would follow the absurd proposition that there is an appearance without anything that appears’ (CPR, Bxxvii, 115).
\item CPR, A151/B190, 279.
\item In the next chapter I argue that Meillassoux has fundamentally misunderstood one of the central lessons of Kant’s transcendental idealism – that we can gain \textit{a priori} knowledge of possible appearances (via the Transcendental Deduction) but can have \textit{no a priori} knowledge of what is possible for things in themselves. This is the reason that a metaphysics of things in themselves is impossible for us, and also why Kant cannot hold that the PNC ‘has an absolute ontological scope’ as Meillassoux claims. In the next chapter I argue that Kant’s various claims about things in themselves should not be understood as metaphysical or factual statements about what could or could not, or does and does not, exist in a super-sensible domain of things in themselves. Instead, I defend the view that Kant’s claims about things in themselves pertain only to how we must \textit{consider} objects construed as things in themselves.
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Before turning to Kant’s critique of Descartes’ ontological argument I want to raise a further, though minor, issue regarding Meillassoux’s claim that in the absence of a refutation of Descartes’ ontological argument, Kant would be forced to concede that we can gain ‘positive knowledge of things-in-themselves’. In addition to the fact that it is not at all clear what Meillassoux means by ‘positive knowledge of the thing-in-itself’, he ignores Kant’s analysis of the notion of God that appears prior to his critique of the ontological argument. Here, Kant argues that the idea of God can be traced back to reason’s drive to reach an unconditioned condition and that this generates an effort to think the totality of predicates under a whole. According to Kant, this totality (or ‘All’) that embraces all conditions and predicates is hypostasised and then personified in the idea of God, the *ens realissimum*, a supremely real entity. Kant’s critique is that, however natural it is for reason to postulate the *ens realissimum*, reason should not lead us to ‘presuppose the existence of a being conforming to the ideal, but only the idea of such a being, in order to derive from an unconditioned totality of thoroughgoing determination the conditioned totality, i.e., that of the limit’.\(^{194}\) Kant denies that the idea of God (including necessary existence) warrants the conclusion that there is in fact such a being.

Let us turn, then, to Kant’s critique of Descartes’ ontological argument. The first thing to note is that for Kant, ontological arguments are characterised by the claim that God’s existence is a necessary feature of his essence. Kant finds this characteristic at work in a range of ontological arguments but in the *Critique* he focuses principally on the ontological arguments developed by Descartes and Leibniz. Meillassoux begins his highly compressed account of Kant’s critique of Descartes’ ontological argument by noting that Kant ‘proceeds by denying that contradiction can obtain anywhere except between an already existing entity and one of its predicates’.\(^{195}\) Kant illustrates this point with an example that speaks directly to Descartes’ view that denying God’s existence would be as illogical as denying that a triangle has three angles. Kant writes that

> ![Image](image-url)

\(^{194}\) CPR, A578/B606, 557.  
\(^{195}\) AF, 32.
to come from? ... Thus you have seen that if I cancel the predicate of a judgment together with the subject, an internal contradiction can never arise, whatever the predicate might be.\textsuperscript{196}

As Meillassoux notes, Kant follows Hume, for whom ‘[n]othing is demonstrable, unless the contrary is a contradiction … [and since] whatever we conceive as existent, we can also conceive as non-existent … there is no being, therefore, whose non-existence implies a contradiction’.\textsuperscript{197} The point is straightforward. While we can accept that denying that God is omnipotent or perfect would be like denying that a triangle has three sides, this is not at all the same as denying the existence of God or a triangle. Just as there is no contradiction in denying the existence of a triangle, so there is no contradiction in denying the existence of God. Of course, this is exactly what Descartes denies. It should be recalled, however, that Descartes’ theory of clear and distinct ideas is not limited by the PNC. For Descartes, whatever can be clearly and distinctly perceived to be contained in the idea of something is true of that thing. Accordingly, Descartes’ argument is that necessary existence is part of the idea or essence of God, whereas necessary existence is not part of the idea or essence of a triangle. In this respect Kant’s critique of Descartes’ ontological argument begins from an analytic premise (that the non-existence of any entity is not a contradiction) that Descartes does not share. Kant clarifies his critique of ontological arguments in a second argument (again foreshadowed by Hume) that has come to be associated with the slogan that “existence is not a predicate”.\textsuperscript{198} Kant is more careful than this slogan suggests.\textsuperscript{199} He writes that ‘[b]eing [or existence] is obviously not a real [or determining] predicate, i.e., a concept of something that could add to the concept of a thing.’\textsuperscript{200} He continues:

In the logical use [existence] is merely the copula of a judgment. The proposition \textbf{God is omnipotent} contains two concepts: God and omnipotence; the little word “is” is not a predicate in it, but only that which posits the predicate in relation to the subject. Now, if I take the subject (God) together with all his predicates (among which omnipotence belongs), and say \textbf{God is}, or there is a God, then I add no new predicate to the concept of God, but only posit the subject in itself with all its predicates....

\begin{footnotes}
\item[196] CPR, A595/B623, 565.
\item[197] David Hume, \textit{Dialogues concerning Natural Religion and Other Writings}, ed. Dorothy Coleman (Cambridge, UK: Cambridge University Press, 2007), par.89, 64.
\item[198] Hume writes that the idea of existence ‘when conjoined with the idea of any object, makes no addition to it’ (1978, 67).
\item[199] Kant readily acknowledges that ‘anything one likes can serve as a logical [and grammatical] predicate’ (CPR, A598/B626, 567).
\item[200] CPR, A598/B626, 567
\end{footnotes}
When I think a thing, through whichever and however many predicates I like (even in its thoroughgoing determination), not the least bit gets added to the thing when I posit in addition that this thing is.²⁰¹

Kant’s point is that when we say “X exists” we are simply affirming that there is something in the world answering to the concept of X. We are not ascribing any particular predicates or properties to X but merely judging that there is a subject X (with all its predicates) in the world. Kant’s dictum that existence is not a real predicate has been subject to a range of criticisms.²⁰² As important as these criticisms are, they need not be analysed here because Kant’s more general point is that regardless of the predicates we attach to concepts, none of

²⁰¹ Ibid., A599–600/B627–B628, 567.
²⁰² Criticisms include the following.
1. Although it has been acknowledged that Kant’s critique of the ontological argument is directed at Descartes’ version, scholars have repeatedly noted that it is not clear whether, if at all, Anselm’s ontological argument is affected by Kant’s dictum (that existence is not a real predicate). Alvin Plantinga, for example, writes that after hearing Kant’s dictum, Anselm could just ‘thank Kant for his interesting point and proceed merrily on his way’ (1998, 60). Gareth Matthews explains why Kant’s dictum is of little importance to Anselm’s ontological argument. Anselm, he explains, ‘does not speak of adding the concept of existence… to the concept of God… What he does instead is ask us to compare something existing merely in the understanding with something existing in reality as well’ (2004, 90).
2. It has been noted by Jerome Shaffer (1962) that Kant’s definition of a ‘real predicate’ as something which is added to and which enlarges a subject contradicts his claim that ‘every existential proposition is synthetic’ (CPR, A598/B626, 566). For Kant, synthetic judgments (unlike analytic judgments) ‘add to the concept of the subject a predicate that was not in it at all, and could not have been extracted from it through any analysis’ (CPR, A7/B11, 141). As Shaffer explains, Kant, therefore, contradicts himself because if ‘existential judgments are always synthetic then “exists” must be a predicate which adds to the concept of the subject… [i.e.,] a “real” predicate’ (1962, 309). Shaffer notes a similar contradiction in Hume who claims in his Treatise both that the non-existence of something never entails a contradiction and that ‘to reflect on any thing and to reflect on it as existent, are nothing different from each other’ (1978, 66) which is to say that the notion of existence adds nothing to the idea of an object because it is already contained in the idea of an object. As Shaffer notes, the obvious problem with Hume’s argument is that he seems to hold both that ‘whatever we conceive we cannot conceive as non-existent’ and that ‘whatever we conceive we can conceive as non-existent’ (1962, 309).
3. There is an obvious sense in which the predicate or property of existence is often highly informative. Although it may be otiose to inform a bar tender that the whiskey you would like to drink is one that exists, it is not always uninformative to add that something has the property or quality of existence (or non-existence). For example, explaining to a child that the monster in their dream does not exist is highly informative, even if we concede that in all other respects the properties of a particular existing monster are the same as a particular monster that populates a dream.
4. This issue complicates the preceding one somewhat. What is meant by the notion of existence is ambiguous because existence (and also non-existence or even reality and non-reality) seems to depend on the semantic context that frames the way in which we refer to a particular object. For example, in one sense unicorns exist. Not only can we point to them in books, we can also talk about their properties. In another sense, however, unicorns do not exist – they are not the kind of thing one might find in a zoo or a museum of natural history. Similarly, in one sense the objects of your dreams exist (as in “this really occurred in my dream”) and in another sense they do not exist because they are not the kind of thing that might be tripped over (at least outside of a dream). Similarly, in one sense, imaginary friends exist and in another sense they do not exist just as in one sense numbers exist, and in another sense they do not. Indeed, in one sense Meinong is right to argue that as a notion, square circles exist because we can talk about square circles and their properties. Of course, in another sense, square circles do not and could not exist because there could be no representation of a square circle, or any material object that might answer to the name square circle.
these predicates serve to demonstrate that something does or must exist. Kant explains that ‘whatever and however much our concept of an object may contain’ the only means by which we can ‘provide it with existence’ is to ‘go out beyond’ our concept.203 The ‘out beyond’ Kant has in mind is, of course, that which is given to us in sensibility. He explains that we provide a concept with existence through the connection with some perception of mine in accordance with empirical laws; but for objects of pure thinking there is no means whatever for cognizing their existence, because it would have to be cognized entirely a priori, but our consciousness of all existence (whether immediately through perception or through inferences connecting something with perception) belongs entirely and without exception to the unity of experience, and though an existence outside this field cannot be declared absolutely impossible it is a presupposition that we cannot justify through anything.204

Kant’s point is that human beings can legitimately judge or demonstrate that something exists only by way of evidence – either from the perception of an object or inference drawn from empirical laws. This follows from the discursive nature of our intellect: from the fact human cognition of objects requires sensible intuition, which is why we have no means to judge whether ‘objects of pure thinking’ exist. This is not to say that objects outside the field of our possible experience are impossible, but it is to say that we have no means of determining whether such objects or entities exist.205

Although Meillassoux does not follow Kant in arguing that knowledge of what exists requires at least some evidence drawn from sensory intuition, he concludes that Kant’s critique of Descartes’ ontological arguments, and in particular the claim that there is no entity whose denial would result in a contradiction, is decisive: we can, he says, ‘refute every proof that would presume to demonstrate the absolute necessity of a determinate entity’.206 According to Meillassoux, this refutation serves to undermine all dogmatic metaphysics, because to be dogmatic, he says, is ‘invariably to maintain that this or that – i.e. some determinate entity –

203 CPR, A601/B629, 568.
204 Ibid.
205 The question of how we square this assertion with Kant’s various claims about things in themselves will be addressed in the next chapter.
206 AF, 32.
must absolutely be, and be the way it is, whether it is Idea, pure Act, atom, indivisible soul, harmonious world, perfect God, innate substance, World-Soul, global history, etc’.  

Although this account of dogmatism has its roots in Kant’s critique of Descartes’ ontological argument, it is worth noting that it lacks a crucial element of Kant’s critique of dogmatism. Kant characterises dogmatism in the following terms:

\[\text{[Dogmatism]} \text{ is the presumption of getting on solely with pure cognition from (philosophical) concepts according to principles … without first inquiring in what way and by what right it has obtained them. Dogmatism is therefore the dogmatic procedure of pure reason, without an antecedent critique of its own capacity.}\]

Kant’s complaint is not that we deploy the dogmatic procedure of pure reason. In fact, he explains that ‘science must always be dogmatic’ in that ‘it must prove its conclusions strictly \textit{a priori} from secure principles’. Rather, his complaint is that it is dogmatic to deploy reason without first investigating its limits and legitimate frameworks of application. If we reflect on Meillassoux’s procedure we see that no such critique of reason takes place. It is one thing to follow Kant (and Hume) in using the PNC to demonstrate that ‘there is no prodigious predicate capable of conferring \textit{a priori} existence upon its recipient’; it is another thing to follow Kant and note, as above, that the discursive nature of our intellect means that our knowledge of the universe (and the use to which reason can be put in the service of that knowledge) is limited because our knowledge of the world requires sensible intuition. In one sense correlationism is Meillassoux’s way of putting Kant’s thesis that knowledge is limited in this way. The difference, however, is that Meillassoux’s account of correlationism’s defences is predicated on a poor argument that does not at all reflect Kant’s critique of reason. Insofar as the thrust of my thesis is that, when understood correctly, Kant’s correlationism and the finitude it entails is eminently defensible, I shall also argue that at the heart of Meillassoux’s approach is a tacit rationalist dogmatism, the result of which is the illicit extension of the understanding beyond its legitimate field of application.

\[207\text{ Ibid., 33.}\]
\[208\text{ CPR, Bxxxv, 119.}\]
\[209\text{ Ibid.}\]
From the Critique of Metaphysics to the ‘Principle of Unreason’

Meillassoux contends that insofar as the ontological argument seeks to establish that the essence of a particular being [e.g., God] guarantees its existence ‘it is intrinsically tied to … the principle of sufficient reason’. The principle of sufficient reason (PSR) can be broadly characterised as stipulating ‘that everything must have a reason, cause, or ground’ and that in the absence of a reason, cause or ground there could be no things, facts or occurrences. He claims that this intrinsic link (between the PSR and ontological argument) can be discerned in the way in which the infinite regress entailed by the PSR is typically halted by an appeal to a self-grounding, necessary being. The process is straightforward: if we adhere to the PSR then whatever explanation is given for A needs to be accounted for by a further explanation (B) that requires a further explanation (C), and so on, ad infinitum. So, for example, Meillassoux notes that ‘although thought may be able to account for the facts of the world by invoking this or that global law…it must also, according to the principle of reason, account for why these laws are thus and not otherwise’. Thus, even if a reason or set of reasons can be found that are ‘reasons for the world…it would yet be necessary to account for this reason’. The upshot, claims Meillassoux, is that if thought is to avoid an infinite regress while submitting to the principle of sufficient reason, it is incumbent upon it to uncover a reason that would prove capable of accounting for everything, including itself — a reason not conditioned by any other reason, and which only the ontological argument is capable of uncovering, since the latter secures the existence of an X through determination of this X alone.

In short, if we are committed to the PSR and compelled to avoid an infinite regress, then we must locate or posit a necessary entity that is self-explanatory, which is to say, its own reason or ground. According to Meillassoux, when the PSR is combined with the thesis that ‘at least one entity is absolutely necessary (the thesis of real necessity)’ then ‘it becomes clear how [dogmatic] metaphysics culminates in the thesis according to which every entity is absolutely

\[^{210}\text{AF, 33.}\]
\[^{212}\text{AF, 33.}\]
\[^{213}\text{Ibid.}\]
\[^{214}\text{Ibid.}\]
necessary’. Unfortunately, Meillassoux does not spell out exactly why this is clear. His reasoning seems to go something like this: once the PSR is embraced and a necessary entity is posited (to address the problem of an infinite regress of reasons) then the PSR’s chain of reasons (and the entities and occurrences that these reasons explain) are conferred with ‘absolute necessity’ because their ultimate ground, their final reason or explanation, is a necessary (i.e., self-grounding) entity whose non-existence would be contradictory. I take it that this is what Meillassoux means when he claims that the ‘ontological argument is the keystone that allows the system of real necessity to close upon itself’.

This intimate connection between the PSR and the ontological argument underpins one of the most important components of Meillassoux’s argument in _After Finitude_. For it allows him to develop the grounds upon which he derives the ‘principle of unreason’, according to which ‘there is no reason for anything to be or to remain the way it is’ so that ‘everything must, without reason, be able not to be and/or be other than it is’. That thesis is predicated on the following argument: if the only means by which the PSR can avoid an infinite regress is to deploy an ontological argument (that subsequently confers necessity upon everything) then once the ontological argument is denied (following Hume and Kant’s critique) the PSR crumbles and consequently any and all entities are unmoored from ‘absolute necessity’. I turn to that argument shortly, and to the ‘principle of unreason’ in Chapter 4, but precisely because both rely on Meillassoux’s claim that the PSR requires the ontological argument (to avoid an infinite regress) it is important to determine the extent to which this claim is sound. Indeed, it is hard to overstate the importance of the bond between the PSR and ontological arguments in Meillassoux’s overall approach. For, the ‘primary absolute’ that Meillassoux hopes to establish in order to overcome correlationist scepticism and secure the grounds upon which the ‘absolute scope of mathematics’ might be founded (and the ‘literal meaning’ of ancestral claims vindicated) is predicated on the refutation of both the ontological argument and the PSR. For this reason, I want to assess three issues: 1) whether Meillassoux is right to claim that the PSR and an infinite regress are incompatible; 2) whether he is right to claim that if both the PSR is embraced and a necessary entity is posited (to halt an infinite regress) then we are inexorably

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215 Ibid.
216 Ibid.
217 Ibid., 60.
led to the conclusion that ‘every entity is absolutely necessary’, and 3) whether a denial of the ontological argument entails a denial of the PSR.

In what follows I will reply to each of these questions in order to demonstrate that Meillassoux’s argument is far less obvious than his brief presentation suggests. This is not to say that Meillassoux is wrong to claim that there is a logical link between the PSR, a necessary entity and the necessity of all things. Indeed, a plausible case can be made for the claim that once the PSR is embraced we are compelled to conclude that there must be a necessary entity (whose non-existence would be contradictory) and that, therefore, all things are determined. Unfortunately, Meillassoux does not make much of a case for this argument. This would be less important if his critique of the PSR was merely incidental to his central thesis. The problem is that Meillassoux’s conclusion – that the PSR is false because the ontological argument is false – constitutes the grounds of the argument that underpins his conclusion that all things are necessarily contingent and that anything can happen anywhere and at any time for neither a cause nor on account of any reason.

In reply to the first question I demonstrate that there is no obvious incompatibility between the PSR and an infinite regress of explanations or causes. I concede, nonetheless, that the ontological argument for God is indeed invoked to answer the PSR’s demand for a final reason. In reply to the second question I draw on Leibniz’s reply to Spinoza’s necessitarianism (the view that all things are “absolutely necessary”) and the former’s distinction between logical and hypothetical necessity, to highlight that it is not obvious that the combination of the PSR and the ontological argument entails strict necessitarianism. In reply to the third I address Kant’s treatment of the PSR.

Question 1. Are the PSR and an infinite regress incompatible?

In order to address this issue I turn to two of the PSR’s most famous exponents: Spinoza and Leibniz.218 In the Ethics, Spinoza combines a clear commitment to a very strong version of the PSR with no obvious objection to an infinite regress of causes.219 Spinoza writes that

218 The virtue of using Spinoza and Leibniz as exemplars of the PSR is that, unlike Aristotle and Aquinas (both of whom also adhere to the PSR) neither Spinoza nor Leibniz reject actual infinities. See Caleb Cohoe (2013).
every singular thing, or any thing which is finite and has a determinate existence, can
neither exist nor be determined to produce an effect unless it is determined to exist and
produce an effect by another cause, which is also finite and has a determinate
existence; and again, this cause also can neither exist nor be determined to produce an
effect unless it is determined to exist and produce an effect by another, which is also
finite and has a determinate existence, and so on, to infinity.220

On this view, it is the PSR itself that demands that the causes of contingent and finite entities
are part of an infinite causal chain. For Spinoza, the existence of an infinite regress of causes is perfectly legitimate. Nonetheless, Spinoza also argues that there must be a sufficient reason that explains why a contingent infinite chain of causes is instantiated in reality. He finds the sufficient reason or ultimate ground for the instantiation of a contingent infinite chain in a necessary and infinite being that exists in virtue of its own essence and that is the ground of itself, i.e., God.221 This suggests that Spinoza does indeed posit a necessary being in order to address the conflict between the PSR and an infinite regress. In one sense, this is Spinoza’s approach, because the PSR demands that a sufficient reason is found that accounts for the regress of causes by explaining the total causal series – by grounding all contingent entities, events and series on a necessary (i.e., self-grounding) being.222 In another sense, it is clear that Spinoza has no problem with an infinite regress of causes or explanations. He allows for an infinite regress of causes or explanations so long as the entire infinite chain is grounded in a being that is itself not contingent, for otherwise the infinite chain of causes or explanations would remain merely contingent and its instantiation in reality would not be sufficiently explained.

219 Spinoza’s commitment to the PSR is strong insofar as reasons or causes must explain not only why something is but also why other things are not. Thus, he writes ‘[f]or each thing there must be assigned a cause, or reason, both for its existence and for its nonexistence’ (1994, p11, 91) and that ‘if a certain number of individuals exists, there must be a cause why those individuals, and why neither more nor fewer, exist’(1994, p8, s2, 89). (Spinoza’s propositions are marked ‘p’, his definitions marked ‘d’ and his scholium marked ‘s’).


221 The considerable interpretive challenge of understanding the compatibility between Spinoza’s claim that an infinite God is the cause of all things and his claim that all finite things are subject to an infinite chain of causation is addressed by E.M. Curley (2013), Charles Jarrett (2011) and Mogens Lærke (2013).

222 There is some debate regarding how best to classify Spinoza’s argument for God. Martin Lin (2007) argues that of the four arguments Spinoza deploys to argue for the existence of God only one follows the standard form of the ontological argument. This argument, according to Linn, is also the least convincing of Spinoza’s arguments and that the other three are not only more convincing but also all based on the PSR.
A similar story is found in Leibniz's philosophy. Again, Leibniz adheres to the PSR but does not rule out the possibility of an infinite regress of causes. Like Spinoza, his strategy is to ask why there is an infinite causal series or chain in the first place (or, indeed, why there is anything at all). In the following passage from the *Monadology*, Leibniz draws on the distinction between efficient causes and sufficient reasons to argue that although there is an infinite series of contingent 'shapes and motions' the ultimate reason for the infinite series of contingent facts and their causal relationships must lie outside these contingent facts and the contingent series:

[t]here is an infinity of past and present shapes and motions that enter into the efficient cause of my present writing, and there is an infinity of small inclinations and dispositions of my soul, present and past, that enter into its final cause …And since all this detail involves nothing but other prior or more detailed contingents, each of which needs a similar analysis in order to give its reason, we do not make progress in this way. It must be the case that the sufficient or ultimate reason is outside the sequence or series of this multiplicity of contingencies, however infinite it may be… And that is why the ultimate reason of things must be in a necessary substance in which the diversity of changes is only eminent, as in its source. This is what we call God.

Thus, like Spinoza, Leibniz argues that the infinite series of finite existents is contingent and that the ultimate explanation for the infinite series of contingent facts and their causal relationships is a necessary being, God. An ultimate or sufficient explanation cannot index something that is part of the series of contingent entities or else that too would require a further explanation. This is why the sufficient or final reason for the series of contingent

\[223\] Leibniz’s commitment to the PSR is made clear in the *Monadology*: there is ‘no true or existent fact, no true assertion, without there being a sufficient reason why it is thus and not otherwise’ (1989, §32, 217).


I certainly grant that you can imagine that the world is eternal. However, since you assume only a succession of states, and since no reason for the world can be found in any one of them whatsoever (indeed, assuming as many of them as you like won’t in any way help you to find a reason), it is obvious that the reason must be found elsewhere. For in eternal things, even if there is no cause, we must still understand there to be a reason…From this it follows that even if we assume the eternity of the world, we cannot escape the ultimate and extramundane reason for things, God (1989, 149–150).

\[225\] Like Spinoza’s, Leibniz’s argument for the existence of God proceeds by way of the PSR. Leibniz’s argument can be characterised this way: If we suppose that there is no necessary being (i.e., God) then we can conclude that there would be only contingent beings. The problem here is that we cannot explain the series of contingent things through some other contingent thing (i.e., another member of the contingent series) because contingent things require some other explanation or cause. Thus, we either accept that no reason for the contingent series of things can be given or we conclude that a non-contingent being explains the series of contingent beings. Thus, if we hold that everything has an explanation (the PSR) then we must conclude that a necessary being exists.
entities or existents must be a necessary entity or existent, i.e., a being that lies outside the series of causes and whose non-existence would be a contradiction.

For both Spinoza and Leibniz, there is no incompatibility between an infinite series of causes or explanations and the PSR. Crucially, the PSR demands only that there is a final or sufficient reason for any (potentially infinite) series of explanations or causes. Nonetheless, as we have seen, insofar as a final or sufficient ground or reason is required to account for the series of causes or explanations, both Spinoza and Leibniz do indeed posit a non-contingent entity. Of course, something whose existence is necessary is something whose existence cannot depend upon anything other than itself. Indeed, insofar as an entity can be understood as necessary it would also have to be uncaused because caused entities and events are contingent. So construed, Kant’s claim that the ontological argument underpins the cosmological argument makes good sense. If the PSR demands that a final, ultimate or sufficient reason must exist to account for all contingent entities and events, then whatever that reason is, it cannot be a contingent entity or event, for otherwise a further explanatory cause would be required. The only entity or event that could be a sufficient or final explanation must be a necessary entity, i.e., one whose non-existence would be contradictory. And the only being that meets this condition is God, i.e., ‘the being of all beings’, whose non-existence is thereby contradictory. Thus, although the PSR is deployed by Spinoza, Leibniz (and others) in the cosmological argument for God (where a first cause and/or sufficient explanation is demanded by the PSR) the reason that God is posited is because God can be understood as un-caused, omnipotent, and (following the ontological argument) necessarily existent.

The PSR is an obscure thesis principally because it is not at all clear what is meant by the notion of a sufficient reason. Drawing out the precise meaning of the PSR would require setting out its various articulations and carefully distinguishing between causes, explanations, grounds, reasons, and giving an account. It would also require addressing thorny questions.

226 There are of course versions of the PSR that adhere to the causal principle (according to which all things have a cause) and conclude that an infinite regress of causes is impossible and that, therefore, there had to be a first cause that stands outside the order of causes. The clearest example of this position is found in what is now termed ‘the Kalam’ cosmological argument. Crucially, this argument combines the causal principle with the view that because nothing comes from nothing (nihil ex nihilo) the universe must have begun to exist at some point. The Kalam argument holds that the only possible cause of the universe is God. See William Craig and James Moreland (2012).

227 CPR, A579/B607, 557.
about what it means for something to be self-explanatory or even self-caused, and how, if at all, we can distinguish these terms and the entities that might answer to them from that which is unexplainable, simply uncaused or just a brute fact. Fortunately, I do need to address these issues here to conclude that Meillasoux’s claim that the PSR is incompatible with an infinite explanatory regress is far from established: it is not obvious that the PSR is incompatible with an infinite regress of causes or explanations. Nonetheless, Meillasoux is right to claim that the ontological argument is deployed as a means to satisfy the PSR’s demand for a final and ultimate reason (whether conceived of as an uncaused cause, or final explanation or ground) for the existence of all contingent entities.

Question 2. If the PSR is embraced and a necessary entity, is posited is ‘every entity… absolutely necessary’?

If Meillasoux is right to claim that the PSR demands that a necessary entity is posited, does it follow that whatever is, is “absolutely” necessary? To approach this question I turn to Leibniz’s critique of Spinoza’s necessitarianism. Spinoza’s commitment to the thesis that all things are necessary does indeed follow from his commitment to the PSR and God’s necessary existence. According to Spinoza, ‘[i]n nature there is nothing contingent, but all things, from the necessity of the divine nature, have been determined to exist and act in a certain way.’

Martin Linn concisely reconstructs Spinoza’s proof for this proposition in the following terms:

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228 See Alexander Pruss (2006) for the most comprehensive contemporary treatment of the PSR.

229 It is worth noting in passing that it is not obvious that the necessitarian conclusion requires either the PSR or a necessary entity. Causal determinism (i.e., the view that every event is necessitated by antecedent events) does not require us to hold that the law of causation is either logically necessary or anything more than a brute fact about the universe.

230 Spinoza, *The Ethics and Other Works* (1994) p29, 104. That proposition is followed by this demonstration:

Whatever is, is in God (by p15); but God cannot be called a contingent thing. For (by 1p11) he exists necessarily, not contingently. Next, the modes of the divine nature have also followed from it necessarily and not contingently (by 1p16); and they either follow from the divine nature insofar as it is considered absolutely (by 1p21) or insofar as it is considered to be determined to act in a certain way (by 1p28). Further, God is not just the cause of these modes insofar as they exist (by 1p24c), but also (by 1p26) insofar as they are considered to be determined to produce an effect. For if they have not been determined by God, then (by 1p26) it is impossible, not contingent, that they should determine themselves. Conversely (by 1p27) if they have been determined by God, it is not contingent, but impossible, that they should render themselves undetermined. So all things have been determined from the necessity of the divine nature, not only to exist, but to exist in a certain way, and to produce effects in a certain way. There is nothing contingent, q.e.d (1994, 104).

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1. Whatever exists (other than God) is a mode of God.
2. God exists necessarily.
3. The existence of the modes follows from the divine nature.
4. The effects produced by the modes follow from the divine nature.
5. Whatever follows from something necessary is itself necessary.
6. Therefore, there is nothing contingent.\textsuperscript{231}

Whereas Spinoza’s argument broadly follows the form of Meillassoux’s argument (according to which the PSR, underpinned by the proof of God’s necessary existence, confers necessity on all things) this is not Leibniz’s approach. Although Leibniz agrees with Spinoza that whatever follows from necessity is itself necessary, he is compelled to develop a critique of Spinoza’s necessitarianism because it is incompatible with God’s freedom. What is worse, for Leibniz, Spinoza’s necessitarianism entails that God is not morally good. He writes that

Spinoza … appears to have explicitly taught a blind necessity, having denied to the author of things understanding and will … It is true that Spinoza’s opinion on this subject is somewhat obscure … Nevertheless, as far as one can understand him, he admits no goodness in God, strictly speaking, and he teaches that all things exist by the necessity of the Divine nature, without God making any choice. We will not amuse ourselves here refuting an opinion so bad, and indeed so inexplicable. Our own is founded on the nature of the possible, that is, of things that imply no contradiction.\textsuperscript{232}

Leibniz’s approach to this issue turns on drawing a distinction between two kinds of necessity: logical necessity and hypothetical necessity. Leibniz outlines the difference in the following terms:

The one whose contrary implies a contradiction is absolutely necessary; this deduction occurs in the eternal truths, for example, the truths of geometry. The other is necessary only \textit{ex hypothesi} and, so to speak, accidentally, but it is contingent in itself, since its contrary does not imply a contradiction. And this connection is based not purely on ideas and God’s simple understanding, but on his free decrees and on the sequence of the universe.\textsuperscript{233}

The meaning of logical necessity is straightforward. As we have seen, for Leibniz, God’s non-existence would be contradictory, just as a triangle’s not having three sides would be

\textsuperscript{231} Martin Lin, ‘Rationalism and Necessitarianism’, \textit{Noûs} 46, no. 3 (2011), 419–420.
contradictory. Thus, God necessarily exists. God’s existence, moreover, does not depend on anything other than God. In this respect God’s necessity is internal to the idea of God. In contrast, hypothetical necessity is that which is necessary on the basis of something else. For example, given that the laws of nature are as they are, then that which occurs is hypothetically necessarily. Thus, if Newton’s first law of motion holds, then it is (hypothetically) necessary that a body will remain at rest or in uniform motion unless acted on by an external force. Leibniz explains that ‘the present world is physically or hypothetically necessary, but not absolutely or metaphysically necessary’ and, therefore, ‘given that it once was such and such, it follows that such and such things will arise in the future’. For Leibniz, the laws of nature and the infinite chain of causes have their ultimate explanation in God, a being whose non-existence would be contradictory. It follows that although all events in the universe are contingent, they are also hypothetically necessary, because events in the universe are dependent on contingent, but hypothetically necessary, laws. Indeed, these laws and the events they govern remain contingent even though they are the result of God’s choice. Crucially, for Leibniz, God must have chosen this world (with its natural laws and causal order) from amongst possible worlds, for if not then God is not free. However, due to God’s perfect goodness, the world that God chose must be the best of all possible worlds. Nonetheless, insofar as other worlds were possible, God still made a choice (even if it follows from God’s nature that he would not have chosen another world). Thus, the necessity for God to choose this world remains hypothetical because it is predicated on the necessity of God’s goodness. Leibniz, therefore, addresses Spinoza’s necessitarianism by arguing that although the world and the events and entities therein are the result of God’s choice (and that choice is the result of God’s perfect goodness) these events remain contingent. The world and the events, laws and entities therein, are hypothetically necessary insofar as their non-existence does not entail a logical contradiction.

Now, Leibniz’s argument is *prima facie* problematic. If it follows from God’s nature that the world that is chosen must be the best then it is not clear in what sense God did in fact have a choice. And if no other possible world was really possible, then it seems that the one God chose is indeed logically necessary. And if the world that God chose is logically necessary then the events, entities and laws therein are themselves logically necessary, i.e., not contingent. Curley puts the issue this way:

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It is an uncontroversial truth of modal logic that if \( p \) is necessary and entails \( q \), then \( q \) is necessary. So if it is (absolutely) necessary that God choose the best, and if the existence of the best world is (hypothetically) necessary in relation to his choice, then it is (absolutely) necessary that the best world exist.\(^{235}\)

However, according to Robert Adams, Leibniz recognised this challenge and in response sharpened his account of the distinction between absolute and hypothetical necessity.\(^{236}\) Leibniz emphasises that although the consequence of an absolutely necessary antecedent is indeed necessary, it (the consequence) remains hypothetically necessary if the antecedent from which it follows is external to the consequence and not contained in its own nature. That is, absolute necessity only follows from absolute necessity if the consequence is intrinsic to or essential to the antecedent. As Adams notes, Leibniz’s ‘phrase “necessary ex alterius hypothesi”’ (necessary on the hypothesis of something else) expresses [the meaning of hypothetical necessity] better than the more usual “necessary ex hypothesi’’.\(^{237}\) Thus, in the Confessions Leibniz explains that

we call necessary only what is necessary per se, namely, that which has the reason for its existence and truth in itself. The truths of geometry are of this sort. But among existing things, only God is of this sort; all the rest, which follow from the series of things presupposed – i.e., from the harmony of things or the existence of God – are contingent per se and only hypothetically necessary.\(^{238}\)

This is why Leibniz’s reply to the issue raised by Curley is that ‘it is false that whatever follows from what is necessary through itself is necessary through itself’.\(^{239}\) For Leibniz, although God’s existence is logically (or absolutely) necessary, what follows from God’s necessary existence (including, it seems God’s choice to actualise the best possible world) is hypothetically necessary and, therefore, contingent. Although God’s perfect goodness entails that the best of all possible worlds was chosen, there was still a choice from among possible worlds and this means that the world that does exist remains hypothetically necessary and, therefore, contingent. The world and the laws that govern the entities and events therein are certainly


\(^{237}\) Ibid., 18.


\(^{239}\) Ibid., 55
grounded on God’s necessary existence but they are not thereby conferred with absolute or logical necessity. In this way, Leibniz claims to avoid Spinoza’s necessitarianism.

The question of whether Leibniz is correct to argue that the universe and the events, entities and laws therein remain contingent despite God’s ontological necessity cannot be settled here. Nonetheless, Leibniz’s separation of logical necessity and hypothetical necessity (or what might be termed contingent necessity) and his argument that contingent necessity can follow from logical necessity and the PSR is compelling. After all, what would it mean to say that God is perfectly good if he had no choice? Even if we accept that there is a necessary entity that serves as the ultimate ground of all things, it does not follow that all things are thereby logically necessary. For example, if we suppose that the laws of physics are willed by God and that God is a necessary entity, there is nothing logically necessary about the laws of physics as such. That is, there is a logically possible world (perhaps a sub-optimal one that God chose not to actualise) with different physical laws. If that is correct, then Meillassoux is wrong that the combination of the PSR and the ontological argument entails that ‘every’ entity is absolutely necessary.

Question 3: Does denial of the ontological argument entail denial of the PSR?

To answer this question we turn to Kant, because he both denies the ontological argument (as we have seen) and affirms a (restricted) version of the PSR. In the Second Analogy of Experience Kant writes that ‘the principle of sufficient reason is the ground of possible experience, namely the objective cognition of appearances with regard to their relation in the successive series of time’.\(^{240}\) The version of the PSR Kant affirms is the principle of causality, ‘the law of the connection of cause and effect’\(^{241}\). In the Second Analogy, Kant attempts to prove that the principle of causality is necessary for the possibility of the experience of change and objective temporal succession. Indeed, he argues that without the objective rule of necessary causal relation that determines the objective succession of perceptions (including transition, ordering, sequence and occurrence) our experience of the world would be impossible.

\(^{240}\) CPR, A201/B246, 311.
\(^{241}\) Ibid., B232, 304.
Kant begins his demonstration with a distinction between two perceptions of succession. The first concerns the succession of perceptions when an observer looks first at the top and then at the bottom of a house (or first at the door and then at the roof, for example). The second concerns a succession of perceptions when an observer sees a ship going downstream.\textsuperscript{242} Kant asks how we distinguish between these sequences of perceptions. In both cases there is first one perception and then another perception. In the first case the top and \textit{then} the bottom of the house is perceived, and in the second case the ship is perceived as being first upstream and \textit{then} downstream. In both cases, there is a temporal sequence of perceptions – first one perception and then another. Indeed, if we consider both examples with respect to perceptions alone, there is no difference between an observer looking from the top of the house to the bottom of a house and an observer seeing a ship at location A and then at location B. What makes these scenarios different? Before setting out Kant’s answer, we should recall that, \textit{pace} Hume, Kant holds that we do not perceive time. That is, there is no sensory impression or sensible data of time that underpins our idea of time. Instead, time is one of the two pure forms of our intuition: it is an \textit{a priori} condition of experience, necessary for experience but not itself found in the content of perceptions. Time, moreover, is a relational form. It is not added to the content of experience; rather it concerns the relation and distinction between perceptions. As such, in both examples of successive perceptions above, there is a temporal succession of perceptions or sensations insofar as one thing and then another is perceived. And this means that it cannot be the mere temporal succession of perceptions that determines the difference between the two cases. Kant argues that what marks the difference between the two temporal sequences of perceptions is that in the former case (looking at a house) the order of perceptions is undetermined by the phenomena that is being perceived, whereas in the latter case (the moving ship) the order of perceptions is determined and irreversible. That is, in principle, I could perceive the features of a house in any order (either by moving around it or by looking from one feature to another). I could, for example, look from bottom to top rather than from top to bottom. In contrast, I cannot choose to perceive the ship as moving from downstream to upstream.\textsuperscript{243} What marks out the objective experience of an event or occurrence from a subjective succession of perceptions is that the sequence of the former is ordered according to a rule. The perception of an event (or occurrence or happening) consists


\textsuperscript{243} This is not to suggest that ships cannot move upstream.
in a ‘combination of representation[s] [which are] necessary in a certain way’. That is, unlike a merely subjective sequence of perceptions, the ‘objective significance is conferred on our representations only insofar as a certain order in their temporal relation is necessary’. Crucially, the necessity (and hence irreversibility) of that order is neither observed in the perception of the event nor, contra Hume, merely a presumption based on previous experience. Rather, as above, the necessity of an objective sequence of perceptions is considered as a rule that governs the possibility of events.

For Kant, the rule that supplies this necessity to objective temporal sequence is the causal law, according to which for any given event or occurrence there must have been something or some things in a preceding event (or state of affairs) that determined that the event must occur as it did. In the case of the ship, the rule dictates that the ship’s movement downstream had to follow from a preceding state of affairs. For example, we might suppose that its initial starting point upstream, combined with the forces of wind and gravity, causally determined the ship’s movement downstream. That hypotheses concerning these causal determinants might be wrong (there may be other empirical factors that caused the event) but, according to Kant, what makes our experience of events objective (and, therefore, in principle the same for anyone observing the same temporal sequence) and possible in the first place, is that it is subsumed under or governed by the law of causality or (what is here the same thing) the PSR. To be clear, Kant is not arguing that we infer that events themselves must be governed by causal law because we must bring the rule of causation to bear on the character of our subjective experience of events in order to make these events intelligible. Rather, his point is that it is the representation of an event (and the perceptions of which that event is comprised) according to the causal law that underpins the very possibility of experiencing a temporal sequence as an event (and not merely an arbitrarily ordered subjective sequence of perceptions). Again, Kant is not arguing that we do in fact know (or even understand) the causal empirical laws or forces that determine (and precede) some event. His claim is simply

244 CPR, A197/B242–3, 309.
245 Ibid.
246 This interpretation underpins Strawson’s well-known complaint that Kant’s conclusion in the Second Analogy (that all events are governed by causal law) is a non sequitur of mind numbing grossness’ (1966, 137). Strawson claims that Kant has conflated the necessity that our perceptions are determined in a rule-governed way (for events to be experienced) with a proof that the events themselves must be governed by causal laws that determine their succession in time.
that insofar as something counts as an experienced or a potentially experienceable event (and can be represented as an event) it must be subsumed under the law of causation according to which an effect is necessitated by and preceded in time by a cause. Kant writes:

If one were to suppose that nothing preceded an occurrence that it must follow in accordance with a rule, then all sequence of perception would be determined solely by apprehension, i.e., merely subjectively, but it would not thereby be objectively determined which of the perceptions must really be the preceding one and which the succeeding one. In this way we would have only a play or representations that would not be related to any object at all, i.e., by means of our perception no appearances would be distinguished from any other as far as the temporal relation is concerned, since the succession in the apprehending is always the same, and there is therefore nothing in the appearance that determines it so that a certain sequence is thereby made necessary as objective. I would therefore not say that in appearance two states follow on another, but rather only that one apprehension follows the other, which is something merely subjective, and determines no object, and thus cannot count as the cognition of any object (not even in the appearance).

Kant’s version of the PSR is the causal law. It is not the thesis that the world and the entities and events therein have an ultimate, final or sufficient reason, explanation or cause. Rather, it is the transcendental thesis that a necessary condition of the possibility of the appearance and experience of events or occurrences is that they are subsumed under or governed by causal law. Without causal law there would be no appearance (and hence no possible experience) of objectively ordered temporal succession. Furthermore, insofar as causal law constitutes a condition of the possibility of objects and events considered as appearances (and thus, as not considered as things in themselves) we have no idea whether causal law pertains to things in themselves. Insofar as Kant accepts that Hume (and Leibniz) are correct to argue that there is no logical contradiction entailed in denying the law of causation, he would concede that it is logically possible that there are events or occurrences that are not bound or governed by causal law. Crucially, however, if Kant is right that causal law is a transcendental condition of possibility for the appearance of events, change, and objective temporal succession (at least for

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247 I return to Kant’s argument in the Second Analogy in Chapter 6.
249 Indeed, it is not clear what human experience could be without the subsumption or ordering of perceptions under the rule of causal law.
250 As I have indicated, I turn to a very close assessment of the relationship and distinction between appearances and things in themselves in Kant’s transcendental idealism in the next chapter.
251 Even though it is not clear what might be meant by an event or occurrence that is not governed by causal law.
beings with our forms of intuition) then if there are events and occurrences in the universe that are not so conditioned then they are by definition beyond our possible cognition and experience. Indeed, so far as we know, events or occurrences that are not bound by causal laws may be actually impossible (because, for example, they would contravene an ultimate law of the universe or God’s will) even if they are not a contradiction in terms.

In reply to the question of whether a denial of the ontological argument entails a denial of the PSR, it is clear that when the PSR is construed as the principle of causality, and the principle of causality is understood as a transcendental condition governing appearances, then the PSR is indeed compatible with a denial of the ontological argument. Now, Kant’s restriction of the PSR to the principle of causation in the field of appearances raises the question of why it is restricted in this way. Here is not the place to address that question in detail. Nonetheless, before rounding off this assessment of Meillassoux’s treatment of the relationship between the PSR, the ontological argument and necessitarianism, and before introducing the argument by which he transforms the failure of metaphysics (in its attempt to establish a necessary or unconditional entity) and the concomitant failure of the PSR into the positive ‘principle of unreason’, I want to register both the significant similarity and the crucial difference between Kant’s and Meillassoux’s critiques of metaphysics. In so doing, I will briefly address why Kant restricts the PSR to the principle of causality. The first similarity is straightforward: Meillassoux explicitly deploys Kant’s critique of the ontological argument to undermine possible proofs of the existence of a necessary entity. The second similarity is that both Meillassoux and Kant hold that reason cannot legitimately satisfy its demand (à la the PSR) to unify all conditions (or reasons) under an unconditioned condition (i.e., a final or ultimate ground). Despite this agreement, their distinctive approaches to the PSR reveals an important difference. Whereas Meillassoux simply confronts the PSR with the problems of an infinite regress and the failure of the ontological argument, Kant argues that reason’s drive to subsume conditions under ever more encompassing conditions (and ultimately to seek out an unconditioned grounds) in its efforts to arrive at a complete and unified account of all reality not only begets dogmatic

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252 This question will resurface in later chapters where we assess Meillassoux’s claim to have established knowledge of things in themselves. I argue that despite his repudiation of the PSR, Meillassoux’s argument for a non-metaphysical absolute that might overcome correlationism still consists in an effort to satisfy reason’s demand to seek out an ultimate ground, or an unconditioned condition that can account for all other conditions. I claim that in so doing Meillassoux deploys reason illegitimately because he is deceived by what Kant terms transcendental illusion.
metaphysics, but also generates antinomies.\textsuperscript{253} Kant’s critique of reason constitutes an effort to diagnose these symptoms, to understand how and why reason leads the understanding astray, and to offer a treatment (if not a complete cure) in the form of the self-disciplining of reason. The result of the self-discipline of reason is that although the understanding requires reason to unify its fragmentary judgments about the world into an integrated system that makes knowledge (and science) possible, reason’s role in the generation of knowledge about the world must be held in check by acknowledging the transcendental conditions of human experience (and in particular the forms of intuition) and the transcendental distinction between appearances and things in themselves.\textsuperscript{254} Of course, this is precisely the limitation Meillassoux hopes to overcome by breaking free of correlationism. Whereas Kant’s transcendental distinction between appearances and things in themselves allows him to rein in reason without undermining the possibility that a necessary entity exists, Meillassoux’s immanent critique of correlationism is an attempt to free reason from these strictures, to prove not only that a necessary entity cannot be known, but also that it cannot exist.

\textsuperscript{253} Kant’s four antinomies function as an indirect proof that transcendental realism is false. Unlike transcendental idealism, transcendental realism ‘regards space and time as given in themselves … [and], therefore, represents outer appearances (if their reality is conceded) as things in themselves, which would exist independently of us and our sensibility’ (CPR, A369, 426). In short, Kant’s strategy in the antinomies is to assume the truth of transcendental realism and demonstrate that it generates antinomial proofs. Kant’s point is that if these mutually exclusive claims can be derived from transcendental realist assumptions, then transcendental realism must be false. I return to Kant’s antinomies in Chapter 7.

\textsuperscript{254} This is not to say that reason should be deployed only in the service of understanding appearances. Reason is formal. In its logical use reason is simply the demand for an answer to the question “Why?”. Kant identifies the formal activity of reason with syllogistic reasoning. Categorical syllogisms demonstrate this clearly. In a categorical syllogism we arrive at the conclusion that Socrates is mortal through the subsumption of a minor premise (Socrates is a man) under a major premise (All men are mortal). But reason is driven to subsume these premises and its conclusion under further premises in order to arrive at a more complete and unified account. Thus, reason seeks out a rule or condition that will explain why all men are mortal, such as, “men are animals, animals are mortal”. Whereas the understanding exhibits appearances by subsuming them under rules, reason drives the understanding to connect together its judgments in to a unity. ‘If the understanding may be a faculty of the unity of appearances by means of rules’ writes Kant, ‘then reason is the faculty of the unity of the rules of understanding under principles’ (CPR, A302/B359, 389). This ‘picture’, as Henry Allison puts it, is one in which ‘in its quest to unify phenomena, [the understanding is] driven by the inherent logic of explanation [i.e. reason] to ever more comprehensive sets of rules…[the ultimate goal of … which amounts to the interconnection of the dispersed, fragmentary cognitions of the understanding under a single principle’ (2004, 310).
Meillassoux’s Strategy: From the Critique of Metaphysics to the ‘Principle of Unreason’

Meillassoux’s next task is framed by his argument that the PSR collapses once the ontological argument is refuted. Solving the problem of the ancestral (which following the form of Descartes’ argument, now consists in an attempt to establish an “absolute” capable of overcoming correlationism and grounding the possibility of knowing the primary qualities of things in themselves) cannot, therefore, make use of an appeal to a necessary entity or the PSR. ‘In order to preserve the meaning of ancestral statements without regressing to dogmatism,’ writes Meillassoux, ‘we must uncover an absolute necessity that does not reinstate any form of absolutely necessary entity’. So Meillassoux follows Descartes’ approach to securing knowledge of the in-itself (i.e., the primary qualities of a mind independent world) but rules out deploying either the PSR or an ontological argument to achieve this. Having clarified that his aim is to find a non-metaphysical absolute, Meillassoux returns to the question of how to contend with the barriers that correlationism puts in the way of knowing that which is not a correlate of thought, or that which is absolute.

The next two chapters take up Meillassoux’s attempt to clarify and defend what he takes to be the most robust articulation of correlationism. That defence not only serves as the basis for an immanent critique of correlationism, but also provides Meillassoux with a route to the non-metaphysical absolute he wants to establish. As we shall see, he pits strong correlationism against absolute idealism to argue that the only way the former can avoid a collapse into the latter is if the limits that underpin both the failure of metaphysics (in its attempt to establish a necessary or unconditional entity) and the failure of the PSR to ground itself are transformed into the positive principle of unreason (later dubbed the ‘principle of factiality’), according to which all things – whether object, event, physical law or even logical law – are construed as contingent facts. In so doing, Meillassoux attempts to transform the epistemological thesis that there is no means of securing knowledge of the ultimate grounds of, or reason for, the existence or inexistence of any matter of fact into the ontological thesis that no grounds or reason does or could exist for the existence or inexistence of any fact.

255 AF, 34.
CHAPTER THREE:
THE TROUBLE WITH CORRELATIONISM?256

Introduction

In the previous chapter we saw that in order to underwrite possible knowledge of primary qualities of things in themselves Meillassoux concludes that he must establish ‘an absolute necessity that does not reinstate any form of absolutely necessary entity’.257 Although Kant’s critique of the ontological argument persuades Meillassoux that we cannot demonstrate the existence of a necessary entity, according to him the requirement to refute the ontological argument does not arise for the strong correlationist. As we have seen, Meillassoux argues that because Kant holds that ‘the thing-in-itself… is thinkable’ he must refute Descartes’ ontological argument or be forced to ‘concede that Descartes has effectively attained an absolute’ i.e., demonstrated possible knowledge of things in themselves. In contrast, the strong correlationist will simply refuse the possibility of knowing ‘an absolute’ because what we do or could know is always “for us”. If Meillassoux is to establish ‘an absolute necessity that does not reinstate any form of absolutely necessary entity’, then, he says, he will have to overcome strong correlationism. Meillassoux summarises the problem in this way:

These then are the coordinates of the problem, according to what we have established so far:

1. If the ancestral is to be thinkable, then an absolute must be thinkable.

2. We accept the disqualification of every argument intended to establish the absolute necessity of an entity – thus the absolute we seek cannot be dogmatic.

3. We must overcome the obstacle of the correlationist circle, while acknowledging that within the strong model which grants it its full extent, the latter not only disqualifies the dogmatic absolute (as did the refutation of the ontological argument), but every form of absolute in general. It is the absolutizing approach as such, and not just the absolutist one (based on the principle of sufficient reason), which seems to shatter against the obstacle presented by the vicious circle of correlation: to think something absolute is to think an absolute for-us, and hence not to think anything absolute.258

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257 AF, 34.
258 Ibid., 51.
In this chapter I return to Meillassoux’s conception of correlationism and the question of why he thinks strong correlationism is more robust than Kant’s weak correlationism. As we have seen, Meillassoux’s immanent critique of correlationism depends on establishing that strong correlationism is more consistent than Kant’s correlationism because, unlike Kant’s own correlationism, the strong version reflects the true ‘obstacle presented by the vicious circle of correlation’. There are, however, two central problems with Meillassoux’s approach, both of which have been mentioned in previous chapters, though not analysed in detail. The first is that the correlationist circle is a terrible argument: the claim that we cannot know or think things in themselves does not follow from the mere fact that we can think only in thought. The second is that Meillassoux’s critique of Kant’s correlationism and subsequent defence of strong correlationism is predicated on the traditional, and in my view mistaken, metaphysical interpretation of Kant’s distinction between appearances and things in themselves. These two issues lie at the heart of my critique of Meillassoux’s argument and my defence of Kant’s transcendental idealism.

I begin this chapter by returning to what Meillassoux says are the core arguments underpinning correlationism: the correlationist circle and the correlationist two-step. I then turn to Meillassoux’s claim that Kant’s correlationism is weak. As we shall see, Meillassoux’s critique of Kant and his defence of strong correlationism deploy the centuries-old complaint that Kant is inconsistent because his claims about things in themselves flatly contradict his view that they are unknowable. Before addressing the historical roots of that complaint and its relationship to the development of post-Kantian German idealism, I turn to David Stove’s and Alan Musgrave’s demolition of the correlationist circle argument (or what they call “the Gem”). Musgrave’s account of the correlationist circle argument not only demonstrates that it is fallacious, but also registers the considerable theoretical pressure that the correlationist circle argument exerted on the history of post-Kantian idealism. Indeed, I will demonstrate that Fichte’s (strong correlationist) reply to Kant’s idealism can be seen as a response to F.H. Jacobi’s influential critique of the purported inconsistencies in Kant’s claims about things in themselves. As we shall see, it is these inconsistencies that motivate Meillassoux’s critique of Kant’s correlationism and his defence of strong correlationism. The central argument in this chapter, however, is that Kant’s purported inconsistencies can be resolved when the distinction between appearances and things in themselves is understood epistemologically, that
is, as two logically correlative ways of thinking about objects according to the conditions of their possible cognition. To this end, I draw on Henry Allison’s interpretation and defence of Kant’s transcendental idealism to demonstrate not only that there is nothing particularly weak about Kant’s correlationism, but also that Kant’s argument does not rely on the correlationist circle. Instead, Kant draws the conclusion that we cannot know things in themselves from the central premise of transcendental idealism: that our knowledge of the world depends on our spatiotemporal intuitive frameworks and that to know things in themselves would be to know them as they are not according to any intuitive framework. Furthermore, we will also see that that conclusion has its roots in Kant’s Copernican revolution and his critique of transcendental realism.

**Correlationism Redux**

As we have seen, correlationism has two central theses according to Meillassoux: the correlationist circle and the correlationist two-step. Although correlationist philosophies are diverse and not at all focused exclusively on the relation between mind and world, according to Meillassoux, they are all underpinned by the correlationist circle. Essentially a reworking of Berkeley’s so-called “Master Argument”, the correlationist circle entails that any attempt to think something in itself that is not in some way “for us” is self-defeating because we cannot think a non-thought.259 ‘[O]ne cannot think the in-itself”, writes Meillassoux, ‘without entering a vicious circle, thereby immediately contradicting oneself’.260 The result of the correlationist circle is that ‘it is impossible to conceive an absolute X, i.e., an X which would be essentially separate from a subject’.261 The second thesis, which Meillassoux terms the ‘correlationist two-step’, is more ambiguous.262 I think the clearest way of thinking about the two-step procedure is to recall Meillassoux’s characterisation of the correlationist exteriority in phenomenology. Here, we have a sort of co-constitutive oscillation between subject and object, thought and being, within correlationism. Although the correlationist circle tells us that we cannot know (or

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259 The term ‘Berkeley’s Master Argument’ is first used by André Gallois (1974). It amounts to the view that thinking about an unperceived or un-conceived material tree, for example, would be impossible because any attempt to do so would be a thought. Berkeley (1999, xxi) writes that ‘[w]hen we do our utmost to conceive the existence of external bodies, we are all the while only contemplating our own ideas.’ We will see presently why this argument is far from compelling.
260 TWB, 2.
261 Ibid.
262 AF, 8.
think) the in-itself, our experience is directed towards an external world – indeed that world impinges on our experience. However, insofar as this exteriority is, nonetheless, “always-already” constituted by us it remains an exteriority “for us”. Thus, any ‘enterprise [to think the in itself] is effectively self-contradictory, for at the moment when we think of a property as belonging to the world in itself, it is precisely the [world as it is for us] that we are thinking, and consequently this property is revealed to be essentially tied to our thinking about the world’. As we have seen, for Meillassoux, the upshot of these principles is that although correlationism is not (at least not explicitly) sceptical about the existence of an external world (it is not phenomenalism) it will not only refuse the possibility of knowing the world as it is in itself, but in its most strident form it also will deny the coherence of the thought of the world as it is in itself.

As above, at the heart of the separation between weak and strong correlationism is that the latter more fully embraces the correlationist circle. Meillassoux draws the distinction between Kant’s weak correlationism and strong correlationism sharply when he writes:

According to Kant’s [weak correlationism], we know a priori that the thing-in-itself is non-contradictory and that it actually exists. By way of contrast, the strong model of correlationism maintains not only that it is illegitimate to claim that we can know the in-itself, but also that it is illegitimate to claim that we can at least think it. The argument for this de-legitimation is very simple and familiar to everyone…the correlationist circle. He makes the point again when he notes that ‘the “argument from the circle” means not only that the thing in itself is unknowable, as in Kant, but that the in itself is radically unthinkable.’ To this Meillassoux adds that, unlike strong correlationism which adheres more robustly to the ‘argument from the circle’, Kant

granted to theoretical reason … the capacity to access four determinations of the in-itself: according to Kant, I know 1) that the thing in itself effectively exists outside of consciousness (there are not only phenomena); 2) we know that it affects our sensibility and produces in us representations (that’s why our sensibility is passive, finite, and not spontaneous); 3) the thing in itself is not contradictory- the principle of non-contradiction is an absolute principle, not one that is merely relative to our

263 Ibid., 4.
264 Ibid., 35.
265 TWB, 2.
consciousness; and lastly, 4) we know that the thing in itself can’t be spatiotemporal because space and time can only be forms of subjective sensibility and not properties of the in itself.  

Meillassoux concludes that, despite holding that things in themselves are unknown and unknowable, ‘Kant is in fact rather “loquacious” about the thing in itself’. In contrast, he says, ‘post-Kantian speculation destroyed such claims [i.e., Kant’s claims about things in themselves] by denying even the possibility of an in-itself outside the self’.  Meillassoux’s critique of Kant’s (weak) correlationism is straightforward. By claiming that we can ‘access’ these ‘four determinations of the in-itself’ Kant simply oversteps the limits imposed by the correlationist circle. Again, the circle argument entails that because we cannot think a non-thought, any knowledge we have about the world is by definition knowledge about the world as it is “for us”, and, therefore, not about the world as it is in itself. In contrast to Kant’s position, the virtue of the strong correlationist model is that it ‘prohibits most decisively the possibility of thinking what there is when there is no thought’. By properly embracing the correlationist circle the strong correlationist model holds that the very notion of a thing in itself is contradictory and thus meaningless.

Now, before responding to Meillassoux’s critique of what he says is Kant’s weak correlationism and to his argument for strong correlationism it is important to pause to register that, even if we accept that knowing things independently of our means of knowing is impossible, it is not at all obvious that thought (or indeed knowledge) of things in themselves, of ‘an absolute X’, is a contradiction.

**Stove’s Gem**

It has been argued that Meillassoux’s belief in ‘the exceptional strength of [correlationism’s] antirealist argumentation’ is misplaced. Both Ray Brassier and Graham Harman have noted that the correlationist circle argument is an unambiguous example of what David Stove

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266 Ibid.
267 Ibid.
268 AF, 36.
269 As we shall see in Chapter 4, Meillassoux combines the strong correlationist commitment to the meaninglessness of the notion of things in themselves with the view that this meaninglessness does not prohibit the possibility of the existence of things in themselves to draw the distinction between strong correlationism and absolute idealism and then transform the former into his speculative materialist position.
270 TWB, 1.
sarcastically termed, “the Gem”, by which he means the worst argument in the world. Put simply, the Gem points out that even if we must employ thoughts to think of anything it does not follow that what is thought of must itself be a thought.

Although Stove’s critique of the Gem is directed principally at Berkeley’s argument, Alan Musgrave rearticulates the Gem’s basic form like this: ‘You cannot X things unless C, a necessary condition for X-ing things, is met. Therefore, you cannot X things-as-they-are-in-themselves.’ Put this way, any argument that states that knowledge is relative to (or correlated with) us (our thought, culture, mind, language, biology, etc.) and that, therefore, we cannot know things in themselves, is an example of the Gem. Musgrave stresses that the Gem is the worst argument there is not only because it derives a non-tautological conclusion (we cannot know or think things in themselves) from a tautological premise (we cannot think

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$300 PRIZE
A COMPETITION TO FIND THE WORST ARGUMENT IN THE WORLD

I know of an argument which, although it is almost-unbelievably bad, has not only escaped criticism by philosophers, but has received the endorsement of countless philosophers. I think it is the worst argument in the world. But I may be wrong: I therefore seek to learn of some argument even worse, if there is one. Entries will be given a mark made up as follows: a mark, out of 50, for degree of badness of the argument; plus a mark, out of 50, for the degree of endorsement which the argument has met with from philosophers; = a total mark out of 100. Thus to win, an argument will need to be either worse, or more influential, than the one I have in mind.

Entries should not exceed half a page in length, and should simply set out the candidate-argument. Entries close 31st December 1985, and should be submitted to me, with your name and address. The prize will not necessarily be awarded. I am the sole judge of the entries, (and the sole donor of the prize-money) (1995, 66).

272 Alan Musgrave, ‘Conceptual Idealism and Stove’s Gem’, in Language, Quantum, Music (Selected Contributed Papers of the Tenth International Congress of Logic, Methodology and Philosophy of Science, Florence, August 1995), ed. M. Chiara, R. Giuntini, and F. Laudisa (Dordrecht, NL: Springer Verlag, 1999), 25–35, 27. Stove locates the clearest expression of the Gem in Berkeley’s master argument. For Stove, Berkeley’s argument amounts to this: ‘you cannot have trees-without-the-mind in mind, without having them in mind. Therefore, you cannot have trees-without-the-mind in mind’ (1991, 139). According to Stove, Berkeley’s argument is both formally fallacious and relies on an equivocation between things conceived (or perceived) and physical things. The tacit equivocation between the thought of an object and a physical object allows Berkeley to collapse the latter into the former and then claim to conclude that the latter is incoherent, and so impossible. In this respect, Berkeley’s conclusion assumes what he says it proves: it is question begging. Stove was not the first to identify this problem in Berkeley’s argument. See Downing (2013) for an account of a similar critique developed by Bertrand Russell.
something without thinking it) but also because, for him, its conclusion is clearly false. For both Musgrave and Stove it is clear that we can, and do, have objects such as ‘trees-without-the-mind’ in mind all the time, because that is simply what it means to speak about physical or material objects.  

Unsurprisingly, for both Stove and Musgrave, Kant is one of philosophy’s greatest Gem-mongers. ‘Observing that we cannot think of things without bringing them under the categories of our thought’, writes Musgrave, ‘Kant concluded that we cannot think of things-as-they-are-in-themselves … we think of things-as-thought-of-by-us’. Although, as above, Stove’s and Musgrave’s direct realist approach tends to the view that we do in fact know things as they are in themselves, the point here is that for them Kant’s conclusion (that we cannot know things as they are in themselves) does not follow from his premise (‘that we cannot think of things without bringing them under the categories of our thought’).  

**From the Gem to Idealism**

Musgrave claims that once Kant embraced the Gem, and once a pursuant distinction between phenomena and noumena is postulated, two core problems emerge that encourage the

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273 Stove’s appeal to the common-sense use of language is persuasive, not least because it is very witty. He writes:

> All sane use of language requires that we never relax our grip on the tautology that when we speak of kangaroos, it is kangaroos of which we speak. Berkeley would persuade us that we lose nothing, and avoid metaphysical error, if we give up kangaroos in favour of phenomenal kangaroos: in fact we would lose everything. Phenomenal kangaroos are an even poorer substitute for kangaroos than suspected murderers are for murderers. At least a suspected murderer may happen to be also a murderer; but a phenomenal kangaroo is a certain kind of experience, and there is no way it might happen to be also a kangaroo (1991, 110).

Stove takes a similar approach to what he says is Berkeley’s meaning argument. According to him, Berkeley’s meaning argument begins from the premise that when we say an object exists, or has certain qualities, we mean that this object or quality is perceived, or that under particular circumstances it would be perceived. Berkeley, says Stove, concludes from this that ‘[i]t either makes no sense or is self-contradictory, to say of a physical object or a quality of a physical object, that it is unperceived and would not be perceived whatever the circumstances were’ (1991, 141). In reply, Stove complains that ‘the only rational response to Berkeley’s meaning argument is simply to say that we do *not* mean that a physical object or quality is perceived, or would be perceived under such-and-such circumstances, when we say that it exists. And this is something which (to borrow a phrase from Berkeley) *whoever understands English, cannot but know*’ (1991, 142).


275 Strictly speaking Kant’s point is not that we cannot know things in themselves because we must use categories to think them. It would be more accurate to say that for Kant we cannot know things in themselves because we must ‘use’ our forms of intuition to know them. The difference is crucial to Kant’s argument but does not affect Musgrave’s critique.
embrace of full-blown idealism. The first problem is the ‘inescapable cognitive disadvantage’
that we cannot know ‘the real things’.

The second problem is that, in order to maintain the
sharp distinction between appearances and things in themselves, Kant is compelled to claim
that although things in themselves exist they possess no phenomenal qualities (‘no colours,
smells, tastes, shapes or sizes, motions or weights’) and (what is ‘queerer still’) they are not in
space or time and cannot play a role in causing phenomena. In short, as Musgrave puts it,
‘things-in-themselves are nowhere, at no time, and do nothing’. For Musgrave, the problems
that result from Kant’s embrace of the Gem ‘disappear… if we do away with the noumenal
world and its things-in-themselves, and opt for idealism’.

It is interesting that Musgrave’s brief account of the pressures to embrace idealism to a large
extent tracks Meillassoux’s account of why the strong correlationist position is more rigorous
than Kant’s weak position. Although Musgrave and Meillassoux clearly disagree about the
strength of the correlationist circle argument, they both hold that the correlationist reply to
Kant’s problematic claims about things in themselves tends towards a full-fledged idealism in
which the notion of the thing in itself is finally extirpated. Of course, in contrast to
Musgrave – for whom Kant’s problems stem from embracing the correlationist circle (and the
pursuant view that there are distinct noumenal and phenomenal domains) – Meillassoux holds
that Kant’s problems emerge from an inconsistent embrace of the circle argument in the first
place, from a failure to adhere fully to the circle argument’s demand that the in-itself is
unknowable. As we saw above, Meillassoux claims that in its more robust form the (strong)
correlationist reply to Kant’s weak correlationism maintains that even the notion of things in
themselves is incoherent: it is a contradiction in terms and, therefore, meaningless.

From F. H. Jacobi’s Challenge to Fichte’s Strong Correlationism

The complaints both Musgrave and Meillassoux raise in response to Kant’s distinction

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277 Ibid., 27.
278 Ibid.
279 Ibid.
280 Hegel sums up this trajectory in post-Kantian thought well in The Science of Logic: ‘In its more consistent form,
transcendental idealism did recognise the nothingness of the spectral thing-in-itself, this abstract shadow divorced
from all content left over by critical philosophy, and its goal was to destroy it completely’ (2010, 21.31, 27).
between, and claims about, appearances and things in themselves are far from new. Musgrave’s issue (that Kant’s things in themselves seem to have no properties, are not in space and time and yet somehow cause phenomena) and Meillassoux’s critique that Kant contradicts himself (when he claims to know that things in themselves are unknown and unknowable but also that they exist, are non-contradictory, non-spatiotemporal and affect our sensibility) are at least as old as the second edition of the *Critique of Pure Reason*. Their complaints almost exactly repeat the words of Kant’s influential contemporary F.H. Jacobi, who in 1787 raised three discrete but overlapping problems in Kant’s *Critique*. The first is Meillassoux’s issue: Kant’s claim that things in themselves are unknown and unknowable is incompatible with his claims that they exist, are not in space and time, and cause appearances. The second, related, ontological problem is closer to Musgrave’s concerns. It is the question of how things in themselves which are not in space and time could possibly affect us and cause appearances. The third issue for Jacobi (which Musgrave basically shares) is that transcendental idealism amounts to Berkeleyan idealism or phenomenalism, despite Kant’s explicit refutation of this charge.\(^{281}\) The conclusion Jacobi draws from these issues is summarised in his frequently quoted remark that ‘without that presupposition [of the thing in itself] I could not enter into [Kant’s] system, but with it I could not stay within it’.\(^{282}\) Accordingly, Jacobi argues that in order to avoid collapsing under its internal tensions, transcendental idealism must be unburdened of its vestigial commitment to things in themselves and hence from its commitment to the existence of an extra-mental reality. It is for this reason that Jacobi concludes his appendix with the following challenge:

> The transcendental idealist must have the courage, therefore, to assert the strongest idealism that was ever professed, and not be afraid of the objection of speculative egoism, for it is impossible for him to pretend to stay within his system if he tries to repel from himself even just this last objection.\(^{283}\)

One highly influential response to Jacobi’s challenge can be found in Fichte’s reworking of

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\(^{281}\) This charge (that Kant’s transcendental idealism amounts to a Berkeleyan or phenomenalist variety of idealism) was articulated in the very first published review of the *Critique*, by Christian Feder and J. G. Garve in 1782. It so infuriated Kant that in response he published an appendix to the *Prolegomena*, explaining how and why transcendental idealism differs from Berkeley’s idealism. Moreover, the addition of the chapter on ‘The Refutation of Idealism’ in the second edition of the *Critique* can be seen as another attempt to address this persistent critique. For the Feder/Garve review and a discussion, see Brigitte Sassen (2007), 53–77.


\(^{283}\) Ibid., 338
Kant’s transcendental idealism and notion of things in themselves. Indeed, as Meillassoux notes, Fichte’s idealism is a model form of strong correlationism. As with the phenomenological version of correlationism, Fichte argues that both subject and object are co-constituted and, moreover, that the I, or transcendental ego, is the ground of the division between self and world. In the brief exposition of Fichte’s idealism that follows, we shall see that Fichte not only embraces the correlationist circle and two-step, but in so doing also responds to both Jacobi’s challenge and his critique of Kant.

In the introduction to his *Science of Knowledge* Fichte contends that all scholars prior to himself have misunderstood Kant. Fichte’s critique of the ‘Kantianism of the Kantians’ is that in their hands, and based on their misunderstanding and cherry picking of passages in the *Critique*, Kant’s doctrine of things in themselves is rendered dogmatic and absurd. Insofar as these vulgar Kantians take Kant to be claiming that things in themselves cause appearances or sensations they are fundamentally mistaken, claims Fichte. After refusing as dogmatic any view that takes mind-independent objects to be the cause of sensation or perception, Fichte argues that we need only concede that we are affected by *something*, not that this something exists outside us. Thus, Fichte writes: ‘certainly our knowledge all proceeds from an affection; but not affection by an object.’ Indeed, his judgment is that ‘[t]he thought of a thing possessing existence and specific properties in itself and apart from any faculty of representation is a piece of whimsy, a pipe dream, a nonthought.’

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284 In his presentation at the Speculative Realism workshop at Goldsmiths’ College in 2007 Meillassoux writes that it was Fichte who provides ‘the most rigorous expression of the correlationist challenge to realism’ (2007, 410).

285 He writes:

> It may appear arrogant and disparaging to others when a solitary person appears and says: Till this moment, among a crowd of worthy scholars who have devoted their time and energies to the exposition of a certain book, there is not one who has understood this book in anything but a completely distorted fashion; they have discovered in it the very opposite system to that which is propounded therein; dogmatism instead of transcendental idealism: I alone, however, understand it aright (1982, I:481, 53).


287 Indeed, Fichte says he will ‘decline to believe what his expositors have to tell of him [Kant]’ until and unless Kant ‘expressly declare[s]… that he derives sensation from an impression given by the thing-in-itself; or, to employ his own terminology, that sensation is to be explained in philosophy from a transcendental object existing in itself outside us’. ‘If he does issue such a declaration’, Fichte claims he ‘would…regard the *Critique of Pure Reason* as a product of the most singular accident than of a human head’ (1982, I:486, 58).

288 Ibid., I:489, 60

to be objects external to the self – as existing outside of, and independent of, the self – are in fact ‘posited and determined by the cognitive faculty’. In fact, the very idea of that which is not self emerges coevally with self-consciousness; with the demarcation of the self and recognition of its finitude. In this respect, argues Fichte, the self and non-self constitute a dialectical or correlative pair; each being what the other is not. The distinction between both self and non-self follows the form of ‘Determination in general’ in which, he says, everything is ‘posited in terms of that of its opposite, and vice versa’.

Nonetheless, for Fichte, ‘the opposition of self and not-self’ is still derived ‘from the concept of the absolute self’ which is why, he concludes, both that ‘[t]he concept of reality is first given with and by way of the self’ and – far more radically – that ‘[t]he source of all reality is the self’. Strictly speaking, therefore, for Fichte insofar as there is no reality independent of thought there are no things in themselves. Just as ‘the reality of a not-self’ is always ‘for the self’, what we take to be ‘things-in-themselves [are] constituted…as we…make them’ and thought ‘according to the laws of our mind’.

The upshot is that for Fichte ‘we can never escape from ourselves, never speak of the existence of an object without a subject’. Of course, as we saw above, for Fichte just as we cannot ‘escape from ourselves’ or ‘speak of an object without a subject’, so too can we not escape from that which is other to (or not) ourselves and speak about a subject without an

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291 Ibid., I:130, 126.
292 Ibid., xiii, I:134, 129.
Fichte’s discussion of the relationship between absolute self, self and non-self in the *Science of Knowledge* is notoriously tangled. Grasping the meaning of the absolute self as the ground of the distinction between self and non-self is unnecessary here. However, Günter Zöller (2000, 203) provides a fairly clear rendering of the meaning of ‘absolute self’:

The basic concern of Fichte’s philosophy with finite reason is captured in his own characterization of the core of his philosophical project, the *Wissenschaftslehre*, as providing a “pragmatic history” of the human mind. The central feature of the human mind is the I (Ich) or reason as such. Following Kant’s distinction between theoretical (or cognitive) and practical (or conative) reason, Fichte contrasts the “theoretical” or “intelligent I” and the “practical I.” The two I’s are to be taken not as separate entities but as distinct, though intimately related, moments or aspects of the one, unitary structure of rational mind. The “absolute I” that informs the operations of both the theoretical and the practical I has a twofold role in the mind’s history, as told by Fichte’s philosophy. It marks the elusive, almost mythical point of origin that precedes the I’s self differentiation as theoretical and practical I – an origin in which the I is everything and everything is I; and it figures as the equally elusive, ideal goal of a complete reconstruction of the I’s original position, in which all subsequent differentiations vanish again. Real mental life takes place in between these infinitely remote points of origin and termination.

293 In his *System of Ethics*, Fichte highlights that although from ‘the point of view of ordinary consciousness things appear governed’ by laws of nature and properties that exists outside of us, ‘from the transcendent standpoint it appears utterly absurd to assume a Not-I as a thing in itself, in abstraction from all reason’ (2005, 97).
295 Ibid., I:286, 252.
object. Accordingly, for Fichte, the correlationist circle is inescapable:

[F]inite spirit must necessarily posit something absolute outside itself (a thing-in-itself), and yet must recognize, from the other side, that the latter exists only for it (as a necessary noumenon), is that circle which it is able to extend into infinity, but can never escape. 296

In addition to generating an inescapable circle, Fichte holds that the dual status of things in themselves as that which is ‘something for the self, and consequently in the self’ and also that which by definition ‘ought not to be in the self’ leads to an irresolvable tension, so that, in the end, the thing in itself is ‘a contradiction’. 297

If the distinction between self and non-self is underpinned by ‘the absolute self’, and the notion of the thing in itself is variously dogmatic, contradictory, and impossible (at least insofar as it indexes something independent of the self), it would seem prudent for Fichte to completely excise the notion of the thing in itself from his philosophy and embrace a form of absolute idealism. But he abjures from this conclusion. To see why, we must turn to his doctrine of feeling.

Although Fichte holds that the distinction between the self and non-self is made possible ‘in virtue of the finite self’s positing of its infinite or absolute self’, he claims that this theoretical derivation is a mere abstraction because the absolute self refers to no actual or possible consciousness. 298 Indeed, for him, the abstract idea (and ideal) of an absolute or infinite self, postulated by theoretical reason, is itself predicated on the finite self. 299 This circularity, wherein both absolute and finite selves presuppose each other, has its ground and condition of possibility in a still more foundational force. Fichte’s ‘pragmatic history of the human mind’ locates the individual self’s differentiation from everything else, and therefore its origin as self,

296 Ibid., I:281, 247.
297 Ibid. The contradiction is unsolved by Fichte. Indeed, according to him it could not be solved because the contradiction lies at the heart of all existence. He explains that ‘[t]his relation of the thing in-itself to the self forms the basis for the entire mechanism of the human and all other finite minds. Any attempt to change this would entail the elimination of all consciousness, and with it of all existence’ (I:281, 247).
299 For Fichte, the absolute self indexes both the beginnings and ends of the mind’s history. It marks both the origin of the I before its differentiation (in which the I is everything and everything is the I), and the ideal goal of the I as the dissolution of all differentiation; and thereby a return to its original position. For Fichte ‘Real mental life’, as Zöller puts it, ‘takes place in between these infinitely remote points of origin and termination’ (2000, 203).
in the experience of being limited and constrained. These limits or constraints are, to use Daniel Breazeale’s expression, ‘announced by the presence of a manifold of sensations or sensible “feelings”’. For Fichte, the experience of feeling is a necessary condition for the existence of both self and non-self: the former cannot come into existence without the feeling that it is limited in its activities; the latter is required in order to account for these feelings. This doctrine of ‘original feeling’ or ‘original impulse’, as Breazeale notes, ‘is simply a less abstract name for what Fichte elsewhere characterized as a necessary Anstoss or “check” on the practical activity of the I’. In Fichte’s work, the term ‘Anstoss’ refers both to a limit and impetus. Without this original limit, argues Fichte, the self would be incapable of discerning any object whatsoever, itself included, and would, therefore, not be a self at all. In this respect, the Anstoss functions as ‘the prime mover’, an impulse underpinning the ontogenesis of both self and non-self. In addition, however, Anstoss also indexes both the everyday experience of feelings and sensations, and, as Frederick Beiser puts it, the simple fact of ‘the finitude of the human predicament…that we do not have the creative power to produce the entire world’. It is because the Anstoss is required as both the force underpinning the origin of self (and non-self) and an ever-present necessary condition of human experience, that Breazeale argues ‘the true “Fichtean Self” … is always involved with finitude … [i]t is not the sole author

300 Fichte, Science of Knowledge, I:214, 198.
302 Ibid., 116.
303 As Breazeale explains:

the German term “Anstoss” was employed in the late eighteenth century with quite a number of overlapping and often figurative meanings, two of which are particularly relevant to Fichte’s usage. On the one hand, an Anstoß is an obstacle or hindrance (Hindernis or Hemmung); on the other, it is an impetus or stimulus (Anlass, Impuls, Antrieb, or Anregung) (2013, 159).

304 The Anstoss, claims Fichte, is felt. The Anstoss, however, does not designate something from outside the self: rather it is the necessary ‘opposing force’ that the self experiences about itself. Fichte (1982, I:280, 246) writes:

According to the Science of Knowledge, then, the ultimate ground of all reality for the self is an original interaction between the self and some other thing outside it, of which nothing more can be said, save that it must be utterly opposed to the self. In the course of this interaction, nothing is brought into the self, nothing alien is imported; everything that develops therein, even out to infinity, develops solely from itself, in accordance with its own laws; the self is merely set in motion by this opponent, in order that it may act; without such an external prime mover it would never have acted, and since its existence consists solely in acting, it would never have existed either. But this mover has no other attribute than that of being a mover, an opposing force, and is in fact only felt to be such.

of its own being (though it nevertheless strives to be such), but is always an embodied and temporally conditioned, finite, individual knower and agent’. In contrast with this finite self, the absolute self is what the finite self would be if it were wholly freed from the limitations of its surroundings, against which it strives and becomes a self in the first place.

Breazeale acknowledges that Fichte’s doctrine of feeling or Anstoss is, broadly speaking, homologous with the notion of the thing in itself as the ground of appearances, representations or sensations. While Fichte occasionally draws the same comparison, for him the crucial distinction between Anstoss or feeling and the thing in itself is that what is given to us in experience, whether feelings, sensations or anything else, does not come from outside the self. Rather, and to repeat what has been said above, according to Fichte both Anstoss and feelings refer to something that arises within the self but is not chosen by the self. Indeed, Fichte concludes both that feelings are subjective because ‘the I never feels an object, but only itself’, but also, paradoxically, that the self is subject to feelings because, ‘the I cannot produce any feeling within itself’.

Despite Fichte’s claim that the Anstoss and feelings do not amount to things in themselves, and moreover that they are one of the means by which the notion of a metaphysical thing in itself might be exorcised from idealism, Hegel was unconvinced. For Hegel, Fichte’s idealism is

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307 Breazeale (2013, 192) highlights the following passage in Fichte’s manifesto ‘Concerning the Concept of the Wissenschaftslehre or, of So-called Philosophy’ written in 1794 as an advert for his private lectures. Here, in a footnote, Fichte writes:

Some future Wissenschaftslehre may well be able to settle this controversy [concerning the connection between our cognition and things in themselves] by showing that our cognition is by no means connected directly through representations with things in themselves, but is connected with them only indirectly, through feeling; that in any case things are represented merely as appearances, whereas they are felt as things in themselves; that no representations at all would be possible without feeling; but that things in themselves can be recognized only subjectively, i.e., insofar as they affect our feeling.

308 Indeed in the introduction to the Science of Knowledge, Fichte rules out such an association. More specifically, he rules out the idea that feelings can be shown to derive from a more fundamental source, or from things in themselves. He writes:

The wish to explain this original feeling further, by attributing it to the efficacy of a somewhat, is the dogmatism of the Kantians, which I have just been pointing out, and which they would be happy to impose upon Kant. This somewhat of theirs is necessarily the ill-starred thing-in-itself (1982, I:490, 61).

both dogmatic and subjectivist. It is dogmatic because his doctrine of Anstoss and feeling essentially reproduces the doctrine of metaphysical things in themselves underpinning representations. The result, argues Hegel, is that Fichte is inconsistent: for he cannot hold both the idealist position that there is nothing in the self except what is posited by the self, and also that something – whether Anstoss, feelings, or something deeper still – influences the self. According to Hegel, Fichte’s claim in the *Science of Knowledge* that we cannot escape from the (correlationist) circle is undermined by his starting principle: that ‘the I posits itself as an I’.\(^{310}\) This starting point of pure thought, of immediate, abstract self-consciousness, ought to preclude entering the circle in the first place. Thus, according to Hegel, insofar as Fichte argues that something outside the self is required in order for self to exist in the first place, he abandons his own central principle. And in this respect, Hegel concludes that Fichte fails to unify self and non-self, or subject and object, in the self and instead embraces dualism.\(^{311}\)

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\(^{310}\) Ibid., I:96, 97.

\(^{311}\) Although Hegel’s most extensive critique of Fichte is set out in *The Difference Between Fichte’s and Schelling’s Systems of Philosophy* (1988, 119–154), in his discussion of Fichte in his lectures on the history of philosophy (1896, 494–495) Hegel is usefully explicit and direct. Here, Hegel identifies the ‘empty repulsive force’ (Anstoss) as ‘the Kantian thing-in-itself, beyond which even Fichte cannot get’, and claims that ‘in spite of’ his ‘endeavours to reconcile’ subject and object or self and non-self into a unity in the absolute self, ‘he leaves the false basis of dualism undisturbed’ (495). For Hegel, the root of these issues (that Fichte is unable to overcome dualism and that despite his efforts he is forced to dogmatically retain Kant’s thing in itself in the theory of Anstoss) is that Fichte’s idealism (like Kant’s) is subjective. Simply put, Hegel’s argument is that Fichte’s attempt to overcome dualism, to reconcile subject and object, by grounding self and non-self in the self cannot be sustained because there will always be a requirement to maintain – and in the end dogmatically – that what is given to the subject has a relationship to something outside the subject. In other words, as Beiser concisely puts it, for Hegel, ‘Fichte’s subjective idealism maintains that the form of experience derives from the transcendental subject, even though the matter of experience is given’ (2002, 12).

Although Hegel’s criticism of Fichte’s idealism is distinctive, the groundwork for his interpretation of Fichte as a subjective idealist was set out in Jacobi’s early and influential reading and assessment of Fichte’s philosophy. Written in 1799, just twelve years after his challenge to Kant’s transcendental idealism in the *Appendix*, Jacobi’s open letter to Fichte (1994, 497–536) contains the accusation that Fichte is an exponent of subjectivism, nihilism and atheism. In addition to doing much to promulgate the charge of subjectivism, Jacobi’s letter paved the way to the development of Hegel’s (and Schelling’s) objective or absolute idealism insofar as these were a reply to the purported subjectivist defect in Fichte’s philosophy. The various ways in which Fichte has been charged with subjectivism from his day on are summarised by Edward Schaub (1912). The received view that Fichte’s philosophy is hopelessly subjectivist, almost tantamount to solipsism, is captured well by James Clarke (2015, 1006) who notes:

> For a long time, the transcendental philosophy of J. G. Fichte … enjoyed a poor reputation. The reason for this is not hard to discern: Fichte’s system of transcendental philosophy … was traditionally associated with an outlandish form of idealism which maintains that the world (or ‘Not-I’) is wholly produced by an ‘absolute I’ (where the absolute I was interpreted either as the individual subject of experience or as a supra-individual mind). Not surprisingly, such a conception of idealism has been rejected as wildly implausible by many philosophers. Thus, Bertrand Russell claimed that Fichte ‘carried subjectivism to a point which seems almost to involve a kind of insanity’, and the neo-Kantian Hermann Cohen dismissed Fichte’s idealism as an ‘extravagant subjectivism’ on the grounds that it attempts to ‘derive the complete individual content of experience, [including] air and water’ from self-consciousness.
This brief excursion into Fichte’s idealism serves two purposes here. The first is to highlight that in key respects Fichte is a model exponent of strong correlationism according to Meillassoux’s definition. For Fichte, both subject and object, thought and world, self and non-self, are co-constitutive: there can be no subject without object and vice versa. Nonetheless, for Fichte, the two terms are underpinned by the ‘absolute self’. While this underpinning lends significant support to the charge that Fichte is indeed committed to a form of absolute idealism (subjective or otherwise), according to some commentators Fichte’s idealism is moderated by a commitment to an ‘abstract realism’ which means that although there is only a world “for us” (i.e., a ‘non-self’ in Fichte’s terms), the self is subject to a limit or check in the confrontation with its own finitude which is both necessary for the distinction between self and not-self to arise, and is discovered in its confrontation with the stuff (i.e., feelings and sensations) of experience. Although Fichte’s doctrine of feelings and Anstoss is suggestive of the notion of things in themselves, insofar as that notion indexes the world as it is apart from us, it is, he says, contradictory. Thus, Fichte is a very clear exponent of the strong correlationist position according to which the thing in itself is neither knowable nor thinkable.

The second reason for this exposition of Fichte’s philosophy is that his response to Jacobi’s challenge represents an effort to rearticulate and update Kant’s transcendental idealism so as to avoid even the appearance of relying on metaphysical claims about thing as they are in themselves. As we have seen, the strategy by which Fichte addresses the prima facie contradictions Jacobi highlights in Kant’s thought involves unifying Kant’s division of intuition

312 Here are two examples from The Science of Knowledge in which Fichte claims to develop a form of realism.

It will at once be apparent that this mode of explanation is a realistic one; only it rests upon a realism far more abstract than any put forward earlier; for it presupposes neither a not-self present apart from the self, nor even a determination present within the self, but merely the requirement for a determination to be under taken within it by the self as such, or the mere determinability of the self (I:211, 189).

The Science of Knowledge assuredly occupies the mean between the two systems, and is a critical idealism, which might also be described as a real-idealism or an ideal-realism (I:281, 247).

Another passage in which Fichte claims ‘The Wissenschaftslehre is realistic’, clearly suggests a commitment to the requirement for something to exist outside of consciousness. It also underscores that this something is felt.

"The Wissenschaftslehre…] shows that the consciousness of finite natures simply cannot be explained unless one assumes the presence of a force that is independent of them and completely opposed to them, upon which they themselves depend for their empirical existence. However, it asserts no more than this: that there is such an opposed force, which is not cognized but only felt by the finite creature in question (1988, 9). (Highlighted in Breazeale, 2013, 192)."
and cognition into the single principle of the absolute I. In so doing, Fichte attempts to ensure that nothing extrinsic to the self affects the self. Whether or not Fichte’s argument works or Hegel is correct that he remains beholden to the thing in itself need not concern us here. Of more interest, at least for my purposes, is that despite claiming that Kant did not (and could not) mean that things in themselves cause appearances, Fichte’s version of idealism consists in an effort to address Jacobi’s complaints.

Fichte’s philosophy reflects the fact that from Kant’s day to ours, the question of how to make sense of – let alone reconcile – his claims about things in themselves has been a mainstay of Kantian scholarship. Underpinning that question, however, is a more basic question of how we should interpret the nature of the distinction between appearances and things in themselves. Today, the debate is centered on the question of whether the distinction between things in themselves and appearances in Kant’s philosophy should be understood metaphysically or epistemologically. The metaphysical (‘traditional’) reading remains fairly standard. At the heart of this interpretation is the idea that things in themselves and appearances denote two distinct ontological domains or realms. On this view, the realm of appearances is known to us and organised according to our forms of intuition and the categories of the understanding, and the world of things in themselves is the real but unknowable world of things that lie beyond, and yet somehow cause the world of appearances. This traditional metaphysical interpretation very clearly underpins Jacobi’s reading and rejection of Kant’s transcendental idealism, just as it does Peter Strawson’s seminal reading and rejection of Kant’s idealism two hundred years later. And it is clear that both Musgrave’s and Meillassoux’s critiques of Kant are based on

313 Strawson explicitly characterises Kant’s notion of things in themselves as indexing a reality that exists independently of the sensible world (i.e., the world of appearances). He writes that for Kant ‘reality is supersensible and . . . we can have no knowledge of it’ (2007, 16). Like Jacobi, Strawson takes Kant’s claims about things in themselves to be epistemologically and ontologically incoherent and concludes that Kant’s transcendental idealism amounts to phenomenalism. The only element in transcendental idealism which has any significant part to play in those structures [the structures of Kant’s arguments and solutions], writes Strawson, ‘is the phenomenalistic idealism according to which the physical world is nothing apart from perceptions’ (2007, 246). Rather than reject Kant’s project outright (or, like Jacobi, suggest that the only remedy is a more robust idealism) Strawson argues that, despite providing no remedies for its obvious epistemological and ontological inconsistencies, when transcendental idealism is jettisoned from the Critique many of Kant’s insights can be usefully reconstructed and defended. The central Kantian insight that Strawson defends in The Bounds of Sense is what he calls Kant’s ‘principle of significance’, which he formulates as follows: ‘There can be no legitimate or even meaningful employment of ideas or concepts which does not relate them to empirical or experiential conditions of their application’ (2007, 5). Strawson takes this to be both central to Kant’s thought and an especially useful insight because it underpins ‘the framework of a truly empiricist philosophy, freed, on the one hand, from the delusions of transcendent metaphysics, on the other, from the classical empiricist obsession with the private contents of consciousness’ (2007, 5).
the traditional metaphysical reading of his idealism.  

The Epistemological Interpretation of Kant’s Idealism

We can now turn to the alternative, epistemological interpretation of Kant’s idealism. In what follows I briefly explain and defend the core features of this interpretation. From this explanation and defence I aim to demonstrate four things: first, when understood according to the epistemological interpretation Kant’s transcendental idealism is well equipped to answer Jacobi’s complaint that Kant contradicts himself; second, the consequence of this is that the step from weak to strong correlationism that Meillassoux requires to stage the confrontation between correlationism and idealism is at best unnecessary; third, when properly construed, Kant’s transcendental idealism is not reliant on the Gem (or correlationist circle argument); and fourth, when read metaphysically, Kant’s transcendental idealism is indeed reliant on the Gem.

Although components of an epistemological and one world/two aspect interpretation of Kant’s idealism can be identified in Fichte’s philosophy it is given clearest expression by three contemporary thinkers: Gerold Prauss, Henry Allison and Graham Bird. In this section I

Paul Guyer follows Strawson in rejecting Kant’s idealism but endorsing his transcendental theory of experience. In response to Jacobi’s complaint (that ‘without that presupposition [of the thing in itself] I could not enter into [Kant’s] system, but with it I could not stay within it’), Guyer remarks:

One can enter the critical philosophy, or at least the transcendental theory of experience, without the presupposition of the thing in itself, because none of Kant’s argument for the nonspatiality and nontemporality of things in themselves, certainly none of his argument from legitimate claims of the transcendental theory of experience, succeeds. Thus one can accept the transcendental theory of experience finally expounded in the analogies of experience and the refutation of idealism without any commitment to dogmatic transcendental idealism (1987, 335).

There are, of course, some interpreters who are committed to the view that Kant’s distinction between appearances and things in themselves is metaphysical (things in themselves just are the real entities or real properties of entities) but who, unlike Jacobi, (who suggests a more robust idealism) and unlike Strawson (who suggests that we ought to jettison the idealist-cum-phenomenalist components of Kant’s thought) adopt other strategies to explain the compatibility of Kant’s determinations of things in themselves with the thesis that things in themselves are unknowable. See, for example, the approaches developed by Rae Langton (1998) and Lucy Allais (2015).

Fichte’s anticipation of the epistemological reading of Kant’s idealism can be teased out from his claim that the thing in itself is both within (i.e., posited by) the self and also indexes that which is outside (i.e., not posited) by the self. Allan Wood (2016, 38, n.10) has also remarked that insofar as Fichte develops an account of competing philosophical frameworks in which an account of the relationship between self and world are situated he anticipates Henry Allison’s description of ‘transcendental idealism [and transcendental realism] as
focus on two components of Allison’s particularly systematic interpretation and reconstruction of Kant’s idealism: the transcendental distinction between appearances and things in themselves; and Kant’s critique of transcendental realism in relation to his Copernican revolution and argument for transcendental idealism.

Drawing on Gerold Prauss’ reading of Kant’s Critique and motivated by the contradictions entailed by the traditional metaphysical reading of Kant’s idealism, Allison argues that Kant’s distinction between appearances and things in themselves is best understood as resting on the difference between two ways of thinking about objects, ‘as a contrast between two ways in which such objects can be considered in a philosophical reflection on the conditions of their cognition’.316 On this interpretation Kant’s distinction between appearances and things in themselves is one of logical entailment. Thus, as Michelle Grier puts it, Kant’s approach to ‘the representation of the thing in itself’ can be ‘very generally characterized [as] methodologically entailed by the critical procedure of reflecting on objects in relation to our cognitive faculties’.317

According to this reading, when (in transcendental reflection) we consider things as appearances we consider them in accordance with the categorial and intuitive frameworks of human experience.318 This means that when considered as they appear, objects are in space and time (as these are the forms of our intuition) and can be brought under the twelve categories or rules of the understanding.319 Crucially, in order for the notion of appearance to make sense

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317 Michelle Grier, Kant’s Doctrine of Transcendental Illusion (Cambridge: Cambridge University Press, 2001), 89.

318 Transcendental reflection refers to ‘the kind of cognition to which [concepts] belong’ (A263/B318, 367). It is ‘The action through which I make the comparison of representations in general with the cognitive power in which they are situated, and through which I distinguish whether they are to be compared to one another as belonging to the pure understanding or to pure intuition’ (A261/B317, 367).

319 Allison refers to this as Kant’s ‘discursivity thesis’ which is simply the familiar view that ‘human cognition requires both concepts and (sensible) intuitions’ (2004, xv). This is encapsulated in Kant’s famous motto that ‘thoughts without intuitions are empty, intuitions without concepts are blind’ (A51/B75). That formulation is a contraction of this:

Our cognition arises from two fundamental sources in the mind, the first of which is the reception of
(to avoid ‘a constant circle’ as Kant puts it) it must be contrasted with the notion of something that is not appearance, but which we must assume underpins appearance.\textsuperscript{320} Thus, the relationship between appearances and things in themselves is one of logical implication, so that, as Allison explains, ‘the expression \textit{appearance} is parasitic upon, or at least correlative with, the expression \textit{thing in itself}'.\textsuperscript{321} Just as the notion of “up” makes sense only in contrast to “not up”, and “black” makes sense only in contrast to “not black”, the notion of appearance makes sense only in contrast to the notion of non-appearance, which (on the epistemological reading) is what Kant means by things in themselves. More specifically, in contrast to objects considered as appearances (which are in space and time, and necessarily appear in accordance with the categories of the understanding) objects considered as they are in themselves are objects \textit{considered as they are not appearances}, which is to say, as they are non-spatiotemporally and as they do not appear according to the categories. Allison puts it this way: ‘[i]n considering things as they appear, we are considering them in the way they are presented to discursive knowers with our form of sensibility. Conversely, to consider them as they are in themselves is to consider them apart from their epistemic relation to these forms or epistemic conditions.’\textsuperscript{322}

Although textual support for this reading can be marshalled from passages throughout Kant’s \textit{Critique}, its chief pragmatic virtue is that it provides a robust interpretive framework through which to both address Kant’s \textit{prima facie} contradictory claims about things in themselves (that Jacobi \textit{et al} identify) and defend transcendental idealism. Nonetheless, before looking at the ways in which this reading responds to these claims and coheres with the central tenets of Kant’s philosophy, it will be useful to highlight some of the notable passages in Kant’s writing that most clearly support the epistemological interpretation.

\begin{quote}
representations (the receptivity of impressions), the second the faculty for cognizing an object means of these representations (spontaneity of concepts); through the former an object is \textbf{given} to us, through the latter it is \textbf{thought} in relation to that representation (as a mere determination of the mind). Intuition and concepts therefore constitute the elements of all our cognition, so that neither concepts without intuition corresponding to them in some way nor intuition without concepts can yield a cognition. (A51/B74, 193).
\end{quote}

\textsuperscript{320} The full passage from the \textit{Critique} reads: ‘if there is not to be a constant circle the word “appearance” must already indicate a relation to something the immediate representation of which is, to be sure, sensible, but which in itself, without this constitution of our sensibility (on which the form of our intuition is grounded) must be something, i.e., an object independent of sensibility’ (A252, 348).

\textsuperscript{321} Allison, \textit{Kant’s Transcendental Idealism}, 55. (Unless indicated otherwise, references are to Allison’s 2004 edition).

\textsuperscript{322} Ibid., 16–17.
Support for the entailment thesis – the view that the notion of appearances entails the notion of things in themselves – can be found in both the *Critique* and *Prolegomena*. Kant’s claim that to avoid a ‘constant circle the word “appearance” must already indicate a relation to … an object independent of sensibility’ is echoed in the *Prolegomena* in which Kant writes:

> [I]f we view the objects of the senses as mere appearances, as is fitting, then we thereby admit at the very same time that a thing in itself underlies them, although we are not acquainted with this thing as it may be constituted in itself, but only with its appearance, i.e., with the way in which our senses are affected by this unknown something. Therefore the understanding, just by the fact that it accepts appearances, also admits to the existence of things in themselves, and to that extent we can say that the representation of such beings as underlie the appearances … is not merely permitted but also inevitable.\(^\text{323}\)

Support for the claim that appearances and things in themselves are two correlated ways of considering objects can be found in the introduction to the second edition of the *Critique*. Immediately after introducing his “Copernican revolution” in philosophy Kant notes that

> the same objects can be considered from two different sides, on the one side as object of the senses and the understanding for experience, and on the other side as objects that are merely thought at most for isolated reasons striving beyond the bounds of experience.\(^\text{324}\)

A few paragraphs later, Kant explains that his ‘critique has made necessary … the distinction between things as objects of experience and the very same things as things in themselves’ and, therefore, ‘the object should be taken in a twofold meaning, namely as appearance and thing in itself’.\(^\text{325}\)

Finally, in support of the view that the phrase, “thing in itself” is an abbreviation of “thing considered in itself” (as opposed to a distinct object) used to denote the consideration of objects in abstraction from (or as they are not according to) our forms of intuition, we find these passages in the *Critique*.


\(^{324}\) CPR, Bxviii – Bxiv, 111.

\(^{325}\) Ibid., Bxvii, 115.
If we abstract from our way of internally intuiting ourselves and by means of this intuition also dealing all outer intuitions in the power of representation, and take objects as they may be in themselves, then time is nothing. It is only of objective validity in regard to appearances, because these are already things that we take as objects of our senses; but it is no longer objective if one abstracts from the sensibility of our intuition, thus from that kind of representation that is peculiar to us, and speaks of things in general.\footnote{326}

The understanding accordingly bounds sensibility without thereby expanding its own field, and in warning sensibility not to presume to reach for things in themselves but solely for appearances it thinks of an object in itself, but only as a transcendental object, which is the cause of appearance (thus not itself appearance) … If we want to call this object a noumenon because the representation of it is nothing sensible, we are free to do so. But since we cannot apply any of our concepts of the understanding to it, this representation still remains empty for us, and serves for nothing but to designate the boundaries of our sensible cognition and leave open a space that we can fill up neither through possible experience nor through the pure understanding.\footnote{327}

So, how does the epistemological reading of Kant’s distinction between appearances and things in themselves respond to Jacobi’s complaints? We have already seen why consideration of objects as they are in themselves (and thus as not appearances) is by definition the consideration of objects as non-spatiotemporal. I have also suggested why, pace Meillassoux, the consideration of objects as they are in themselves is not a contradiction: despite objects as they are in themselves being unknowable, the notion of such objects in transcendental reflection is logically entailed by the notion of objects as appearances. Indeed, it is important to note that without this entailment it is the notion of appearances that would be contradictory. For without the notion of an object in itself as the logical corollary of the notion of an object as it appears we would be forced to conclude that there are only appearances. But, as Kant famously puts it in the introduction to the Critique, ‘an appearance without anything that appears’ is an ‘absurd proposition’.\footnote{328} In fact, the conclusion that there are only appearances is tantamount to the view that appearances are things in themselves; which is effectively Berkeleyan phenomenalism.\footnote{329}

The same procedure of logical entailment can be used to unpack the meaning of the claims

\footnote{326}Ibid., A35/B52, 164.  
\footnote{327}Ibid., A289/B345, 381.  
\footnote{328}CPR., Bxxvii, 115.  
\footnote{329}As we shall see, it is also what Kant refers to as transcendental realism.
that objects considered as they are in themselves exist and are the grounds or cause of appearances. To avoid both the conclusion that appearances are all that there is (and in so doing destroying the notion of appearance in the first place) and being forced to embrace Berkeleyan idealism or phenomenalism, we must reason that there is something unknown and unknowable that, nonetheless, underpins the appearance of objects, and which is itself something other than an appearance. In this way, the claim that objects considered as they are in themselves exist is another way of stating that the notion of appearances entails the notion of things in themselves as that which underpins or grounds appearances. We should, nonetheless, note a concern here: in claiming that objects considered as they are in themselves exist, Kant seems to apply the categories of the understanding beyond their legitimate field of application, i.e., the field of objects considered as appearances. The same worry arises when explaining the meaning of the claim that objects considered as they are in themselves can be taken as the ground or cause of objects considered as they appear. However, Allison’s treatment of the so-called ‘problem of noumenal affection’ (i.e., the question of how unknown and non-spatiotemporal things in themselves could cause or ground appearances) offers a persuasive response to these concerns. In reply to the problem of noumenal affection he first addresses and then dismisses one approach that might seem to follow from an epistemological reading of Kant’s idealism. On this approach, Kant should have avoided the claim that things in themselves ground or cause appearances (just as he should have avoided the claim that things in themselves exist and are non-spatiotemporal). Instead, Kant should have concluded that the object that affects us and produces sensation can be only an empirical object, that is, an object considered as an appearance. Thus, we are affected by objects as they appear; as phenomena governed by space, time, and as falling under the categories. In this way, the problem of affection avoids the conclusion that something non-empirical gives rise to or causes sensation. But Allison himself notes that however compelling this reply may seem, it is unsatisfactory because it relies on ‘assigning to an object, considered apart from its relation to human sensibility precisely those features that, according to the theory, it only possesses in

Kant makes this point plain in connection with the question of the possibility of freedom:

For if appearances are things in themselves, then freedom cannot be saved [because] nature is the completely determining cause, sufficient in itself, of every occurrence … If on the other hand, appearances do not count for any more than they are in fact, namely, not for things in themselves but only for mere representations connected in accordance with empirical laws, then they themselves must have a grounds that are not appearances (A537/B656, 535).
As a consequence, he argues, the thought of the object in question (as the ground or cause of appearances) is by definition the thought of something non-sensible; it is the thought of a thing as it is in itself. This might seem to suggest that Kant’s account does indeed tell us something about the matter or the content of things as they are in themselves. To this Allison replies that the requirement to hold the view that what causes or is the ground of appearances cannot be itself an appearance (and must, therefore, be non-empirical or super-sensible) does not commit Kant to any claims about the matter or content of things as they are in themselves. As Allison notes, Kant says exactly this in his response to Eberhard’s assessment of the Critique:

Now that, of course, is the constant contention of the Critique; save that it posits this ground of the matter of sensory representations not once again in things, as objects of the senses, but in something super-sensible, which grounds the latter, and of which we can have no cognition. It says the objects as things in themselves give the matter to empirical intuition (they contain the ground by which to determine the faculty of representation in accordance with its sensibility), but they are not the matter thereof.

Thus, although we can say that things in themselves (conceived here as something super-sensible) are the grounds of the matter of the sensible, this is not at all to say that they are themselves the matter of the sensible or of empirical intuition. On Allison’s reading, the conclusion that to think of an object as the ground of appearances is to think of an object as it is in itself (and not as itself an appearance) is merely an analytic claim based on the concept of an object conceived within transcendental reflection, which is to say, from two logically correlative ways of thinking about objects and the conditions of their cognition. Accordingly, to conceive of an object as the ground of appearance is to conceive of it as it is in itself, just as to conceive of an object as appearance is to conceive of it as not its own ground. In other words, the notion of the ground or cause of an object as an appearance indexes that object considered apart from (but as a logical correlate of) our forms of sensibility. This is what it means to consider an object as it is in itself. Taken as a whole, as Allison puts it, Kant’s claims about things in themselves do not and are not supposed to ‘provide a [metaphysical] story

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about how the mind is affected by a non-sensible entity’. Rather, the determinations that Kant ascribes to objects considered as they are in themselves ‘merely stipulate how the affecting object must be conceived of in the transcendental account of affection required for the explication of Kant’s theory of sensibility’.

Allison acknowledges that Kant uses the language of the categories of the understanding when referring to objects considered as they are in themselves (specifically causation and existence) and he claims that this makes sense because the categories are concepts or rules that apply to the consideration of objects in general. This does not mean that Kant is applying the categories to objects that lie beyond the empirical sphere of appearances. Instead, according to Allison, whether we are dealing with the consideration of objects in general or the consideration of objects in transcendental reflection (which is to say as either appearances or as things in themselves) the function of the categories is ‘purely logical, and does not carry with it any assumptions about their objective reality with respect to some empirically inaccessible realm of being’. To highlight the point, Allison notes that although objects considered as they are in themselves and as the cause of appearances cannot be represented in space and time, this does not prevent such objects or causes being in space or time. Drawing on Kant’s claims that ‘[t]he non-sensible cause of these representations is entirely unknown to us … for such an object would have to be represented neither in space nor in time (as mere conditions of our sensible representation), without which conditions we cannot think any intuition’, Allison explains that ‘Kant does not say that such objects or causes cannot be in space or time, but merely that they may not be represented as in either.’ He continues:

As a result, this prohibition [on knowing things in themselves] must be understood methodologically; it stipulates how an object must be considered, if it is to function in a transcendental account as ‘something corresponding to sensibility viewed as

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333 Ibid., 72.
334 Ibid., 73.
335 Kant makes this plain when he writes that, ‘the categories are not restricted in thinking by the conditions of our sensible intuition, but have an unbounded field, and only the cognition of objects that we think, the determination of the object, requires intuition; in the absence of the latter, the thought of the object can still have its true and useful consequences for the use of the subject’s reason.’ (CPR, B166n, 264).
336 Allison, *Kant’s Transcendental Idealism*, 73.
337 CPR., A494/B522, 512; Allison, *Kant’s Transcendental Idealism*, 70. The remainder of the passage from CPR is worth quoting because here Kant affirms the entailment thesis – that the notion of sensibility entails the notion of non-sensibility. Thus, despite the fact that the non-sensible cause of sensations is unknowable, ‘we can call the merely intelligible cause of appearances in general the transcendental object, merely so that we have something corresponding to sensibility’.
receptivity’. As such, the prohibition does not bring with it any ontological assumptions about the real nature of things or about a supersensible realm.\(^{338}\)

His point is that, for Kant, establishing that things in themselves are in space and time (which may or may not be true) is beyond our possible knowledge even if we can conclude that, in transcendental reflection, the consideration of objects as they are in themselves is by definition the consideration of objects as non-spatiotemporal.

Now, if Allison’s epistemological or methodological interpretation of Kant’s transcendental distinction is sound, then it certainly seems to address both Jacobi’s and Meillassoux’s concerns. Jacobi’s complaint that ‘without that presupposition [of the thing in itself] I could not enter into [Kant’s] system, but with it I could not stay within it’ could have been written by Meillassoux. On Allison’s account one can consistently remain within Kant’s system so long as one works with the method of transcendental reflection and the correlative notions of appearances and things in themselves properly, which is to say, non-metaphysically.

### The Critique of Transcendental Realism and Kant’s Revolution

The other crucial component of Allison’s epistemological interpretation of Kant’s transcendental distinction is the critique of transcendental realism that, he says, underpins Kant’s defence of transcendental idealism. Put bluntly, the distinction between transcendental idealism and transcendental realism is that the latter ‘systematically identifies appearances with things in themselves’.\(^{339}\) Rather than providing a summary of Kant’s account of why philosophies as diverse and antithetical as ‘rationalism… empiricism, metaphysical realism, as ordinarily understood, and Berkeleyan idealism…may be said in one way or another to conflate appearances with things in themselves’ I shall focus on what Allison takes to be the common feature of these philosophical positions and their fundamental contrast with Kant’s transcendental idealism.\(^{340}\) According to Allison, what these philosophies share is a ‘meta-

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\(^{338}\) Allison, *Kant’s Transcendental Idealism*, 70.

\(^{339}\) Ibid., 25.

\(^{340}\) Henry Allison, ‘Kant’s Transcendental Idealism’, in *A Companion to Kant*, by Graham Bird (Oxford: Wiley-Blackwell, 2006), 113. Also see Allison (2004, 23–34) for a discussion of the varieties of transcendental realist philosophies against which Kant positions transcendental idealism. Kant opposes transcendental idealism to transcendental realism this way:
epistemological…commitment (either tacit or overt) to what is sometimes described as the “theocentric paradigm” or model of knowledge.\(^{341}\) He explains that ‘the defining feature of transcendental realism is its underlying assumption that human knowledge is to be measured and evaluated in terms of its conformity (or lack thereof) to the norm of a putatively perfect divine knowledge’.\(^{342}\) Thus, although empiricists marshalled sceptical arguments to criticise rationalists’ claims to have attained \textit{a priori} metaphysical knowledge, they remain, like the rationalists, ‘committed to the normative status of…the theocentric paradigm’.\(^{343}\) By contrast, Kant’s transcendental idealism shifts the grounds of legitimate knowledge of objects from the theocentric, or God’s eye, view to the epistemic conditions that underpin human cognition and experience. It is these conditions that determine what for us could count as an object of knowledge and what objective knowledge of these objects thus consists in. Kant’s argument is that \textit{a priori} knowledge of objects, but only of objects considered as appearances, is possible. In contrast, according to Allison, the metaphysical interpretation of Kant’s transcendental distinction assumes a transcendental realist approach to the \textit{Critique}. On the transcendental realist approach, Kant fails because he should, but cannot, provide an ultimate and metaphysical account of things in themselves that explains precisely what objects are like outside of appearances and exactly how these objects affect, cause, or ground appearances. In other words, on the transcendental realist view Kant fails because he owes us a God’s eye account of objects. Such an approach, however, is entirely to misunderstand his Copernican revolution in philosophy. Kant’s revolution is precisely an attempt to demonstrate that it is the conditions of human cognition that underpin possible human knowledge of objects rather than the opposite, traditional, view that knowledge consist in cognition conforming to objects as

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\(^{341}\) Allison, \textit{Kant’s Transcendental Idealism}, 113–114.

\(^{342}\) Ibid.

\(^{343}\) Ibid.
Indeed, Kant’s revolution consists in showing that such knowledge is impossible for finite beings. For him, the possibility of knowledge and experience of the world is predicated on the relationship between our epistemic and intuitive frameworks. In contrast, knowledge of the world from a God’s eye perspective would be knowledge of objects as they do not appear, i.e., as they are not according to any intuitive framework. In the absence of ordered sensory material there is no object, no world, to which the categories of the understanding can be applied to yield knowledge. Kant’s point is that in the absence of an epistemic framework that combines ordered sensations with the categories of the understanding, knowledge is all but a contradiction in terms.\footnote{The central thesis of Kant’s Copernican revolution is powerfully presented at the outset of the Critique and is well worth quoting in full, not least because it conforms tightly to Allison’s interpretation.}

Up to now it has been assumed our cognition must conform to the objects; but all attempts to find out something about \textit{a priori} through concepts that would extend our cognition have, on this presupposition, come to nothing. Hence let us once try whether we do not get farther with the problems of metaphysics by assuming that the objects must conform to our cognition, which would agree better with the requested possibility of an \textit{a priori} cognition of them, which is to establish something about objects before they are given to us. This would be just like the first thoughts of Copernicus … Now in metaphysics we can try in a similar way regarding the \textit{intuition} of objects. If intuition has to conform to the constitution of the objects, then I do not see how we can know anything of them \textit{a priori} but if the object (as an object of the senses) conforms to the constitution of our faculty of intuition, then I can very well represent this possibility to myself. Yet because I cannot stop with these intuitions, if they are to become cognitions, but must refer them as representations to something as their object and determine this object through them, I can assume either that the concepts through which I bring about this determination also conform to the objects, and then I am once again in the same difficulty about how I could know anything about them \textit{a priori}, or else I assume that the objects, or what is the same thing, the \textit{experience} in which alone they can be cognized (as given objects) confirms to those concepts, in which case I immediately see an easier way out of the difficulty, since experience is a kind of cognition requiring the understanding, whose rules I have to presuppose in myself before any object is given to me, hence \textit{a priori}, which rule is expressed in concepts \textit{a priori}, to which all objects of experience must necessarily conform, and with which they must agree. As for objects insofar as they are thought merely through reason, and necessarily at that, but that (at least as reason thinks them) cannot be given in experience at all – the attempt to think them (for they must be capable of being though) will provide a splendid touchstone of what we assume as the altered method of our way of thinking, namely that we can cognize of things \textit{a priori} only what we ourselves have put in to them. (Bxxii, 112).

I use the qualification ‘all but’ here because, according to the reading of Kant I have developed, God’s knowledge indexes a way of knowing through pure intellectual intuition, as Kant states. In contrast to the knowledge of finite rational beings (for whom knowledge of the world requires the synthesis of given sensations – pre-formed by our intuition – and the categories of the understanding) the way in which an infinite rational being might know (or even think) is a mystery. Whereas a discursive intellect requires sensation, i.e., information provided from an external world, a purely intellectual intuition would create content directly from its mind. It is, therefore, not at all clear that there would be any separation between God (an infinite being) and the universe God creates. As such, there would be no separation between knower and known. See Matt McCormick (2000).
Criticisms of Allison’s Interpretation

Since my argument relies on Allison’s interpretation of Kant, I need to address the most pressing concerns that have been raised against it. My assessment of these criticisms (and indeed Allison’s argument) is not based primarily on the extent to which Kant’s texts support one reading over another, not least because, as Lucy Allais remarks, there is ‘an abundance of apparent textual evidence as well as philosophical considerations that can be appealed to in support of phenomenalist idealist interpreters [e.g., Strawson and Guyer]… deflationary … interpreters [e.g., Allison and Bird]’ and, I would add, even metaphysical realist interpreters (e.g., Langton and Allais) so that interpreters ‘can always find textual evidence which challenges the other’s view’. Instead, my approach is to draw on critical commentary to clarify and defend Allison’s interpretation. To that end, I address three targeted criticisms of Allison’s interpretation. First, I turn to Paul Guyer’s and Rae Langton’s complaint that Allison’s entailment argument (wherein the consideration of objects as things in themselves is methodologically entailed by the consideration of objects as appearances) transforms the notion of things in themselves into a triviality: a mere definition. Allison’s reply not only demonstrates that their complaint rests on a misunderstanding of Kant’s transcendental


347 Presenting a complete account of the range of critical commentary on Kant’s transcendental idealism is not only beyond the scope of my analysis but also unnecessary for my central purpose here, which is simply to establish the plausibility and consistency of Allison’s interpretation and reconstruction. Nonetheless, the criticisms of Allison’s interpretation on which I draw reflect what I take to be the most prominent critical perspectives.

For comprehensive surveys of the interpretive landscape on Kant’s idealism see Ameriks (2003), Allais (2015, Ch. 1), and Schulting and Verburgt (2011, Introduction). Nicholas Stang’s (2016) table of the various positions adopted by a range of commentators on the question of the interpretation of Kant’s idealism provides a useful map of the interpretive landscape:

<table>
<thead>
<tr>
<th>Phenomenalist</th>
<th>Anti-Phenomenalist</th>
<th>Metaphysical</th>
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<tr>
<td>Epistemic</td>
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It is also worth conceding that as persuasive as I find Allison’s approach I would hesitate to conclude that it fulfills the demands of Karl Amerik’s characterisation of the ‘holy grail of Kant scholarship’:

[T]o find a meaning for the doctrine of transcendental idealism that is not only consistent, understandable in its origins, and not immediately absurd, but also does full justice to the complex fact that Kant insists on claiming both that there are ‘real appearances’… that is, appearances disclosing to us features of physical objects that are empirically real, and also that these features are nonetheless ‘mere appearances’ in contrast to ‘things in themselves’ (2011, 48).
distinction in relation to his Copernican revolution, but it also indicates why his interpretation of Kant’s claim that things in themselves are unknowable avoids the fallacious reasoning characteristic of the Gem. 348 Second, I assess Guyer’s complaint that Allison’s method of abstraction is at odds with the way in which, he claims, Kant derives the non-spatiotemporal nature of things in themselves. The basis of Guyer’s rejection of Kant’s transcendental idealism is his view that Kant’s conclusion that things in themselves are non-spatiotemporal is supposed to follow directly from the results of the Transcendental Aesthetic (that our minds organise the raw material of sensation spatially and temporally). Although Guyer finds this argument untenable, it is, he says, not based on a method of abstraction. After introducing Guyer’s phenomenalism interpretation (and rejection) of Kant’s idealism, I turn to Allison’s reply to Guyer’s critique. Although Allison concedes that his approach does indeed rely on a method of abstraction, he argues that Guyer has misunderstood the nature of that abstraction because his critique is premised on a transcendental realist interpretation of Kant’s idealism. Third, I turn to Karl Ameriks’ complaint that Allison’s reading of Kant’s idealism is incompatible with what, he says, is Kant’s view that things in themselves have greater ontological reality than appearances. Allison concedes that his approach is incompatible with that view, but, he argues, so too is Kant’s empirical realism. Allison contends that there is no requirement to assume either that appearances or things in themselves have ontological priority. To demonstrate the point, he argues that we need not assume that the question of whether we are free or determined demands an exclusionary answer (i.e. that one or other answer is ultimately correct and, therefore, has ontological priority), for both answers can be maintained when each is viewed from their respective framework of application. Ultimately, Allison’s point is that appearances and things in themselves are best understood as two distinct (but related) epistemic relations to objects, rather than as distinct objects. 349

348 Ibid. We should note here that Alison’s reply to Langton and Guyer is framed through a reply to the so-called neglected alternative objection wherein Kant neglected the possibility that space and time were both forms of human sensibility and pertained to things as they are in themselves. Allison’s reply (that Langton and Guyer assume a transcendental realist approach to Kant’s claims about things in themselves) is a response to their complaint that the epistemological reading can neither rule out the possibility that things in themselves are spatiotemporal nor rule in the possibility that they are not. 349 A critique of Allison’s interpretation to which he has not replied is Lucy Allais’ recent reconstruction of Kant’s idealism in Manifest Reality. What is novel about Allais’ approach is that unlike Strawson, Guyer, Van Cleve, Langton and Westphal (who reject Kant’s idealism because it is incoherent and/or incompatible with a robust metaphysical realism) she maintains that a straightforward metaphysical realism is compatible with Kant’s idealism. Insofar as she argues that Kant is committed to the view that objects have ‘primary, categorical, non-relational, intrinsic natures that we cannot know’ (2015, 248) Allais’ approach is similar to Langton’s realist reconstruction of Kant’s claims about things in themselves. (For Langton, Kant’s distinction between things in
a) The Gem and the Triviality Charge

Both Paul Guyer and Rae Langton have argued that the entailment argument (wherein the consideration of objects as things in themselves is methodologically entailed by the consideration of objects as appearances) transforms the notion of things in themselves into a triviality, an ‘anodyne recommendation of epistemological modesty’, which amounts to the claim that we cannot know things in themselves because, by definition, knowing things in themselves means knowing things apart from the conditions that make knowledge possible. Put this way, Allison’s take on Kant’s argument for the unknowability of things in themselves is at least suggestive of the Gem. Is Allison’s Kant not saying that knowledge of the world requires certain conditions and that, therefore, we cannot know things in themselves? The short answer is that this is Allison’s argument. Crucially, however, and as we have seen, when the notion of things in themselves is taken to apply to objects considered apart from the conditions of their appearance (i.e., as they are not according to some intuitive-epistemic framework) then as a matter of definition things in themselves are unknowable – even if in transcendental reflection we can apply the categories of the understanding to the notion of things considered as they are in themselves. Unlike the Gem, Kant’s conclusion that we cannot know things in themselves is not a non-tautological conclusion based on the tautology that knowledge requires certain conditions. Rather, Kant’s conclusion (that we cannot know things in themselves) is not an “alternative to ontology” rather than … a position which itself has metaphysical commitments’ (2015, 88). The nub of Allais’ approach is that the things we experience are both mind-dependent in the way that they necessarily relate to us and mind-independent in the way that they have an existence in themselves. Thus, those properties of things we do experience are those properties of things that can be manifest to us, and those properties of things considered as they are in themselves are properties that cannot be manifest to us, which is why we can have no knowledge of them. In this way, Allais’ two-perspective approach avoids both a phenomenalist interpretation of Kant’s idealism and Allison’s deflationary (i.e., non-metaphysical) interpretation.

Unfortunately, I cannot do justice to Allais’ reconstruction of Kant’s idealism here or develop a careful critique of her approach on the basis of Allison’s interpretation. Nonetheless, I think she is right to suggest that Allison would probably complain that her approach assumes the ‘standpoint of transcendental realism’ (2015, 87). Allais’ reply to this presumed criticism is simply that nothing in Kant’s definition of transcendental realism rules out making metaphysical claims about things in themselves.

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as they are in themselves) *is itself tautological*, following directly from the thesis that to consider things as they are in themselves *means* to consider them as abstracted from, or apart from, the conditions of our knowledge of the world.

However, although we can be satisfied that Allison’s interpretation of the transcendental distinction avoids the Gem’s fallacious reasoning, this seems only to reinforce Guyer’s and Langton’s complaint that in Allison’s hands, Kant’s conclusions about things in themselves are trivial and anodyne; that ‘[in his reading of Kant, Allison] … endeavored to resolve a substantive metaphysical dispute by a semantic sleight of hand, [by] making the non-spatiotemporality of things as they are in themselves virtually into a matter of definition’.³⁵¹ But the complaint is not justified.

Allison’s reply both demonstrates that the ‘objection…rests on a misunderstanding of the terms’ and indicates that when viewed according to the metaphysical interpretation, Kant’s conclusion that things in themselves are unknowable *does* follow the Gem’s fallacious reasoning.³⁵² Allison argues that the conclusion that things in themselves are unknowable is not merely the result of the definition of things considered as they are in themselves. Rather, the definition of things considered as they are in themselves *follows* from Kant’s Copernican revolution. As we have seen, Kant’s revolution is based on the view that the theocentric model of knowledge and the transcendental realist approach to its attainment (which tacitly underpins both dogmatic metaphysics and empiricist scepticism) is incoherent because, in the absence of an intuitive framework through which sensory material appears, there can be no empirical object to which the categories of the understanding can be applied; and, therefore, there can be no knowledge of the world and its furniture. For Allison, Kant’s conclusion that things in themselves are (by definition) unknowable is far from trivial: for that conclusion follows from his argument that the particular spatiotemporal form of sensibility that structures the way in which the human mind receives sensory material (and which is required for that material to be ordered and orderable) can be (non-dogmatically) accounted for only if it is regarded as ‘a contribution of the cognitive subject’.³⁵³ Thus, Allison’s reply to the complaint that he tries to ‘resolve a substantive metaphysical dispute by a sleight of hand’ is that the complaint itself

³⁵¹ Allison, ‘Transcendental Realism’, 75.
³⁵² Ibid., 76.
³⁵³ Allison, *Kant’s Transcendental Idealism*, 14.
assumes ‘a transcendentally realist analysis of the situation’, ‘an ontological thesis about the true nature of an sich reality’. His point is that if Kant’s notion of things in themselves is taken metaphysically – if is taken to index that which is really real (in opposition to that which is merely apparent) – then we have misunderstood the way in which the transcendental distinction (according to which the notion of things in themselves is the logical correlate of the notion of appearances) follows from the central insight that underpins Kant’s Copernican revolution: that ‘the way in which sensibility presents its data to the understanding for its conceptualisation already reflects a particular manner of receiving…which is determined by the nature of human sensibility rather than by the affecting object’. What is more, when the transcendental distinction is construed metaphysically, so that the notion of things in themselves is understood to index real reality (whatever that is) then the charge that Kant falls for the Gem fallacy seems to hold. For the claim that we cannot know what is really real does not at all follow from the claim that the conditions of our knowing (and experiencing) the world are underpinned or framed by specific a priori forms of intuition. Indeed, as we shall see, it is a variation of this problem that underpins the rejection of Kant’s idealism developed by interpreters who construe the notion of things in themselves in explicitly metaphysical terms.

b) Guyer vs. Allison – The Charge of Abstraction

Before returning to Guyer’s critique of Allison’s reading it is necessary to set out the former’s interpretation and rejection of Kant’s transcendental idealism. The first thing to note is that Guyer explicitly does not embrace a two-world view. That is, he does not claim that Kant holds the view that appearances and things in themselves are two distinct objects existing in distinct ontological realms. Guyer writes: ‘I have attributed to Kant not a two-world view, but an alternative version of a two-aspect view, on which Kant holds that spatiality and temporality are not aspects of things as they are in themselves but are a necessary aspect of our

\[^{354}\] Ibid., 132.
\[^{356}\] Indeed, we would expect a scientific realist (like Stove or Musgrave) to claim that even if we do not know the details of the ultimate nature of reality, we are well equipped to draw inferences and deploy scientific techniques that enable us to be reasonably confident that we have some knowledge of what is real, as opposed to what is merely apparent.
representations of them.\textsuperscript{357} For Guyer, Kant does not need to postulate that any distinct objects underlie appearances, ‘because the ontology from which he begins already includes two classes of objects, namely things like tables and chairs and our representations of them.’\textsuperscript{358} According to Guyer, ‘to deny that the things we ordinarily assume are spatial and temporal really are so, all [Kant] has to do is transfer spatiality and temporality from objects to our representations of them or confine assertions of spatiality and temporality to the latter’.\textsuperscript{359} He explains that Kant

removed spatiality and temporality from objects to our representations of them, just as previous philosophers had done for properties such as colour and smell – although for a diametrically opposed reason, that is, not the supposed contingency of our perception of those properties, but rather precisely because of the supposed necessity of our perception of those properties … in so doing he was not adding a third class of objects to the world, just redistributing properties between the two classes of objects – namely, representations and things distinct from our representations – that every philosopher of the period, with the possible exception of Thomas Reid, already recognized.\textsuperscript{360}

Thus, although Kant ‘does not postulate a second set of ghost like non-spatial and non-temporal objects in addition to the ordinary referents of empirical judgments’, Guyer’s judgment is that ‘he does something just as unpleasant – namely, degrade ordinary objects to mere representations of themselves, or identify objects possessing spatial and temporal properties with mere mental entities’.\textsuperscript{361} In other words, Guyer reads Kant’s transcendental idealism as a qualified phenomenalism, according to which empirical objects are mere mental entities, even if they have an ambiguous relationship to a ‘class of objects’ ‘distinct from our representations’.\textsuperscript{362} Moreover, he argues that because Kant’s transcendental idealism is based

\textsuperscript{358} Guyer, Kant and the Claims of Knowledge, 335.
\textsuperscript{359} Ibid.
\textsuperscript{360} Wood, Guyer, Allison, ‘Debating Allison’, 13. Thomas Reid’s direct realism is developed against ‘the system of ideas’ or ‘ideal theory’ according to which we experience only the representation of objects. That approach, argues Reid, has its roots in Plato and Aristotle, is equally characteristic of Descartes, Locke, Berkeley and Hume, and disastrously culminates in scepticism. See Reid, 1852, 97–103.
\textsuperscript{361} Guyer, Kant and the Claims of Knowledge, 335.
\textsuperscript{362} Lucy Allais notes that although Guyer and Van Cleve distance themselves from a two-world reading of Kant’s distinction between appearances and things in themselves, ‘we can still see why commentators have wanted to group such interpretations under the ‘two-world’ heading: mental states, mental activities, or ways of mentally being are not aspects or features of the things which have a way they are independently of our being able to experience them. This means that, on this view, there is no sense in which appearances are an aspect of the very
on the absurd argument that things in themselves are non-spatiotemporal simply because space and time are a priori conditions of our sensibility, it should be rejected. Transcendental idealism’ concludes Guyer, ‘is not a sceptical reminder that we cannot be sure that things as they are in themselves are also as we represent them to be; it is a harshly dogmatic insistence that we can be quite sure that things as they are in themselves cannot be as we represent them to be.’

In a written debate with Allison following the 2004 publication of his expanded and updated edition of Kant’s Transcendental Idealism, Guyer repeats the central components of the criticisms he raised in reply to Allison’s first edition. Guyer’s critique has three main components. First, he insists that Kant ‘does offer [unconvincing] arguments that are intended to show that spatiality and temporality in particular are not and cannot be properties of things that exist independently of our representations of those things and which for that reason must be omitted from our conception of things as they are in themselves’. Second, he maintains that Allison is not capable of showing that ‘Kant excludes spatiality and temporality only from the concepts of things as they are and does not ever himself assert that things really are not spatial and temporal.’ Third, and most pressing, Guyer asserts that Kant ‘formulates a conception of things in themselves that does not abstract from but denies their spatiality and/or temporality because of [his] account … of the conditions of the possibility of a priori cognition of the spatiality and/or temporality of the objects of our cognition.’ Indeed, for Guyer, ‘a concept that merely abstracts from certain properties its objects would ordinarily be thought to have does not by itself give us any reason to change our beliefs about what properties those objects do have’.

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363 Guyer’s complaint is of course redolent of the critique of the Gem: Kant’s conclusion that things in themselves are non-spatiotemporal does not follow from the premise that space and time are a priori conditions of sensibility. Indeed, insofar as Strawson, Guyer, and Westphal complain that Kant can neither derive idealism nor conclude that reality is unknowable simply from the fact that there are epistemic conditions required for experience and knowledge, they seem well aware of the fallacious logic characteristic of the Gem.

364 Guyer, Kant and the Claims of Knowledge, 333. As above, the consequence of this is that, like Strawson, Guyer rejects Kant’s transcendental idealism but accepts the insights of his transcendental theory of experience. Thus, his reply to Jacobi is that we can enter and remain within Kant’s system perfectly well without transcendental idealism.

365 Guyer’s critique of Allison’s first edition of Kant’s Transcendental Idealism (1983) is set out in Kant and the Claims of Knowledge, 336–344.


367 Ibid.

368 Ibid., 14.

369 Ibid.
Allison summarises Guyer’s complaints in the following terms: ‘the bottom line … seems to be that on my reading transcendental idealism is a “merely conceptual and abstractionist” doctrine rather than the straightforwardly ontological thesis he takes it to be’.\(^{370}\) In reply, Allison first addresses Guyer’s critique of his ‘abstractionist’ approach to Kant’s transcendental idealism. He complains that Guyer has evidently misunderstood his argument because the claim that things considered as they are in themselves are non-spatiotemporal is not based on abstraction from the properties we normally attribute to objects. Rather, as we have seen, Allison’s point is that things considered as they are in themselves are things considered in abstraction from our sensibility and its conditions. Unsurprisingly, for Allison, the roots of Guyer’s misunderstanding lie in his ‘transcendentally realistic interpretation of Kant’s idealism’. He continues: ‘This interpretation is transcendentally realistic because it assumes that by “things in themselves” are meant the “real” things to which spatiotemporal properties are normally attached, and he takes the idealism to consist in the relocation of these properties to the subjective domain of “mere representations”’.\(^{371}\) It is this ‘underlying picture’, Allison says, that leads ‘Guyer … to account for the otherwise incomprehensible migration of these properties from their natural habitat in things to their new home in the mind’. And, ‘convinced of the correctness of this … reading of Kant, he seems to think that [Allison’s] proposed alternative must reduce to some form of abstractionism’.\(^{372}\) Nonetheless, Allison concedes that the ‘thought of things as they are in themselves does … involve an abstraction of sorts’, namely, that things considered as they are in themselves are understood in abstraction ‘from the specifically sensible conditions through which objects are given’ to us and the ‘intellectual conditions through which they are thought’.\(^{373}\) Allison highlights that, on his reading, Kant’s discursivity thesis entails that both sensibility and the understanding are subject to correlative and reciprocal scope restrictions. Because the ‘intellectual conditions [i.e., the categories]’ are concepts of objects in general, their ‘scope … necessitates a Critical restriction (their reach exceeds their grasp)’.\(^{374}\) That is to say, because the categories are the rules for thinking objects in general, their contribution to our experience and understanding of the world must be restricted to sensibility and its conditions (i.e., space and time). Correlatively, ‘if sensibility were assumed to encompass things in general the understanding would as well’ and this scope

\(^{370}\) Ibid., 32. (Quotation from Guyer in Wood et al. 2007, 4).

\(^{371}\) Ibid., 33.

\(^{372}\) Ibid.

\(^{373}\) Ibid.

\(^{374}\) Ibid., 35.
restriction would be unnecessary.\textsuperscript{375} Hence, he argues, Kant’s ‘restriction of the scope of sensibility to appearances entails that [scope restriction] of the understanding’.\textsuperscript{376} Allison concludes: ‘This restriction of sensibility is a central tenet of transcendental idealism. Indeed … it just is transcendental idealism.’\textsuperscript{377}

Allison’s reply to Guyer’s charge that he cannot demonstrate that ‘Kant excludes spatiality and temporality only from the concepts of things as they are and does not ever himself assert that things really are not spatial and temporal’ is that ‘the answer depends on ‘how one understands the concept of the thing in itself … and how one construes “metaphysical”’\textsuperscript{378} According to Allison, the central difference between his reading and Guyer’s is that, whereas Guyer takes the thing in itself to refer to a class of objects (stripped of the spatiotemporal properties we normally associate with them) he takes things in themselves to be ‘another kind of concept of a thing (one qua cognized by a “pure understanding”’\textsuperscript{379} Allison repeats the point that Kant introduces this other concept of a thing, ‘which, \textit{ex hypothesi}, cannot yield cognition of objects’, precisely in order to ‘effect the scope restriction’ of the categories: for without that restriction ‘our \textit{a priori} cognition based on the categories would encompass objects in general, just as the ontological tradition to which Kant was heir had supposed’.\textsuperscript{380} Because spatiotemporal predicates are restricted to their source in human sensibility, it follows that ‘such predicates are not applicable to things in themselves, understood as things thought through a pure understanding, and, therefore, not to things in general or as such’.\textsuperscript{381} Thus, Allison interprets Kant’s ‘ideality thesis … as an alternative to ontology…rather than a radical move within ontology’.\textsuperscript{382} Indeed, for Allison, this is the meaning of Kant’s remark that ‘the proud name of ontology … must give way to the more modest one of a mere analytic of the pure understanding’\textsuperscript{383}

\textsuperscript{375} Ibid.
\textsuperscript{376} Ibid. Allison notes here that Kant ‘introduces the concept of the noumenon … to curb the pretensions of sensibility to be coextensive with the real’.
\textsuperscript{377} Ibid.
\textsuperscript{378} Ibid., 36
\textsuperscript{379} Ibid. Allison concedes that if the thought the thing in itself was another kind of thing, he would agree with Guyer’s rejection of transcendental idealism.
\textsuperscript{380} Ibid.
\textsuperscript{381} Ibid.
\textsuperscript{382} Ibid.
\textsuperscript{383} Ibid.
Allison concludes his reply to Guyer by explaining that his interpretation and defence of Kant's transcendental idealism is motivated by the fact that the traditional metaphysical or ontological interpretation of things in themselves to which Guyer subscribes entails either that 'things only seem to be spatiotemporal, whereas in reality they are not, or ... that a certain class of things, namely appearances, really are spatiotemporal, but these are merely representations'. The problem with these approaches, however, is that '[t]he first ... makes transcendental idealism into a form of error theory or scepticism, [and] the second makes it into a form of subjectivism or phenomenalism'. When so read, it is easy to follow Guyer and reject Kant's transcendental idealism as both incoherent and dogmatic. Indeed, this is why Allison notes that one reason for rejecting Guyer's phenomenalist reading of Kant's transcendental idealism is that he believes 'perhaps naively, that a philosopher of the calibre of Kant would not embrace such a manifestly absurd view, particularly for the reason that [Guyer] suggests'.

It seems to me that aside from noting that there is textual evidence to support the phenomenalist picture Guyer paints of Kant's idealism, Allison’s interpretation (which is also supported by Kant’s texts) is not only unscathed by Guyer’s critique, but also presents a far more robust, nuanced and profound position. Despite the complexity of Allison’s reconstruction of Kant's argument, its central lesson is clear enough: there is no standpoint-independent perspective on reality. Not only are Kant’s claims about things in themselves neither contradictory nor based on the specious reasoning characteristic of the Gem, they are part and parcel of the view that there is no framework independent knowing, even if we must assume that empirical reality has its ground in a super-sensible reality whose epistemic model is that of the God’s-eye perspective.

c) Ameriks vs. Allison – The Ontological Priority of Things in Themselves

I now turn to the related issue, explicitly raised by Karl Ameriks, that even if we grant that the distinction between things in themselves and appearances is a ‘distinction between two ways of considering things rather than between two kinds of thing’ Allison’s epistemological reading of

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384 Ibid.
385 Ibid. He continues: ‘It is not that I assume that great philosophers, including Kant, are incapable of great mistakes; it is rather I believe (or at least hope) that these mistakes will be more subtle and interesting than those of which Kant is guilty on Guyer’s reading.’
Kant’s idealism does not cohere with Kant’s belief in ‘the absolute reality of things in themselves with substantive non-spatio-temporal characteristics’. Indeed, this problem entails that any non-metaphysical interpretation of Kant’s idealism will struggle to accommodate his view that the ‘non-ideal has a greater ontological status than the ideal’. Like Guyer, Ameriks complains that, ‘the epistemic interpretation, in understanding transcendental idealism as the claim that human knowledge is governed by certain sensible conditions, does not insist on Kant’s own stronger conclusion, which is that there are objects which in themselves have genuine ultimate properties that do not conform to those conditions’. Allison concedes both that there is textual support for the ontological reading of Kant’s idealism and that ‘Ameriks is correct in pointing out that on [his] reading … the non-ideal has no greater ontological import than the ideal’. Nonetheless, Allison notes, even where an ontological interpretation of things in themselves seems fundamental to making sense of Kant’s philosophy, it remains both problematic and unnecessary. According to Allison ‘the strongest support for the ontological reading … appears to come to come from Kant’s moral philosophy, particularly his practical metaphysics of the supersensible’. He continues: ‘By affirming the primacy of practical reason or … denying knowledge in order to make room for faith, Kant is often taken as offering an entrée through practical reason to the very same ultimate reality he had foreclosed to speculation. Accordingly, on this view we are really free, immaterial substances…though we cannot demonstrate this theoretically.’ Allison argues that the problem with the ontological reading of noumenal freedom (and things in themselves in general) is that the conclusion that appearances are merely how things seem (as opposed to how they really are) is ‘hard to reconcile with [the] robust form of empirical realism’ to which Kant subscribes. That is, if Kant is committed to empirical realism – which is the view that, considered as an object of possible experience, that which appears is real indeed – it is clear

388 Ibid.
389 Henry Allison, ‘Kant’s Practical Justification for Freedom’, in *Essays on Kant* (Oxford: Oxford University Press, 2012), 121. Ameriks highlights that ‘The most obvious instance of this is perhaps Kant’s transcendental theology’ (1992, 334). Allison himself notes that the clearest support for the ontological view of things in themselves can be found in Kant’s *Inaugural Dissertation* in which he ‘explicitly contrasted sensible to intellectual cognition as a cognition of things as they appear to one of “things as they are”’. Allison continues: ‘even though the “critical” Kant denied that we have knowledge of the latter type, his continued adherence to the Dissertation’s doctrine of sensibility and his equation of a consideration of things as they are in themselves with a consideration of things as some pure understanding might think them, certainly suggest that the ontological contrast of the earlier work is still operative’ (2004, 46).
390 Allison, *Kant’s Transcendental Idealism*, 46.
that appearances cannot be downgraded to unreality or illusion.\textsuperscript{391} The other option, he says, is to follow Guyer and Strawson and ‘jettison the idealism altogether’.\textsuperscript{392} Thus, he says, ‘there appears to be no solution … save somehow deontologizing the transcendental distinction’.\textsuperscript{393} This, of course, is Allison preferred approach which, as we have seen, consists in identifying appearances and things in themselves as ‘two radically distinct epistemic relations to objects, neither of which is ontologically privileged’.\textsuperscript{394} Allison’s reply to the charge that his epistemological reading of Kant’s idealism is incompatible with Kant’s clear commitment to human freedom is that the charge assumes ‘that there is a “fact of the matter” that needs to be adjudicated’. Indeed, for Allison, the assumption that there is some ‘standpoint-independent fact of the matter … is implicit in any ontological reading of transcendental idealism’.\textsuperscript{395} However obvious it is to insist that there must be an answer to the question of whether we are really free or really not free, Allison argues that Kant’s philosophy allows (in fact requires) us to answer “yes” to both questions: we are both free and determined. Crucially, the warrant for each claim depends on the framework from within which the object in question (i.e., human beings and their freedom) is assessed. From the practical perspective, moral law provides the rational warrant required to assume the truth of our freedom, even though from the theoretical perspective, ‘where the concern is with explanation rather than action’, we must assume that all events are subject to the principle of causation. In other words, there is no framework independent answer to the question of whether we are free or determined. ‘[E]ach point of view (the theoretical and the practical)’ writes Allison, ‘has its own set of norms on the basis of which assertions are justified and each involves considering its object in a certain manner (as they appear and as they are thought of in themselves) … there is no context independent truth or fact of the matter’. He concludes: ‘Otherwise expressed, Kantian dualism is normative rather than ontological’.\textsuperscript{396} Indeed, according to Allison, the assumption that there must be some fact of the matter, that we must be either free or determined, is again predicated on the theocentric paradigm of knowledge and the transcendent realist picture upon which it is premised. Moreover, Allison contends that the assumption that there must be some fact of the matter not only fails to incorporate the lesson of Kant’s Copernican revolution but it also falls

\textsuperscript{391} I return to Kant’s empirical realism in Chapter 7.
\textsuperscript{392} Allison, \textit{Kant’s Transcendental Idealism}, 46.
\textsuperscript{393} Ibid., 46–47.
\textsuperscript{394} Ibid., 47.
\textsuperscript{395} Ibid., 48.
\textsuperscript{396} Ibid., 48.
into transcendental error, i.e., the illicit extension of the categories beyond their legitimate scope. 397

Conclusion

I am now in a position to be able to spell out the conclusions that can be drawn from the various threads of analysis in this chapter. These conclusions emerge from the view that Allison’s epistemological interpretation of Kant’s transcendental idealism is sound, not least because that view avoids the problems of the traditional metaphysical interpretation to which Meillassoux subscribes. We have seen that Allison’s interpretation enables us to make sense of Kant’s claims that unknowable things in themselves exist and that they are non-spatiotemporal and the ground of appearances. In each case these attributes of objects considered as things in themselves is established by logical entailment, from their logical contrast with objects considered as appearances. In addition to giving a robust reply to the traditional complaint (exemplified by Jacobi, Musgrave, and Strawson) that Kant contradicts himself, this reading puts into question Meillassoux’s defence of strong correlationism. For if Kant has not contradicted himself then it cannot be said that the strong correlationist position is superior to Kant’s weak correlationism because it is more consistent. Of course, Meillassoux’s critique of Kant’s correlationism is predicated on the view that his contradictory claims about things in themselves are the result of failing to adhere to the correlationist circle argument. Despite their considerably different approaches, Jacobi, Musgrave, and Meillassoux all argue that once the correlationist circle argument is embraced, the demands of greater consistency tend towards absolute idealism and a rejection of the notion of things in themselves. 398 Fichte’s reply to Jacobi’s challenge (and Hegel’s critique of Fichte’s idealism) exhibits this trajectory. Fichte’s correlationism is indeed a model form of strong correlationism – it exhibits both correlationist circle and two-step arguments and ultimately denies the coherence of the notion of the thing in

397 A variant of Ameriks’ complaint that Allison’s reading does not cohere with what he says is Kant’s view that things in themselves have ‘genuine ultimate properties’ is expressed in Nicholas Stang’s complaint that Allison ‘offers no room’ for Kant’s claim ‘that the intelligible world is the ground of the empirical world’. Indeed, according to Stang, Allison is unable to demonstrate ‘why, on his reading, appearances are not the grounds of things in themselves’ (2014). Although I think Allison’s claim that the notion of the ground of appearances is by definition the notion of something non-sensible responds well to the issues Stang raises, there is clearly a sense in which Allison’s entailment argument does suggest that the notion of things in themselves is grounded on (insofar as it is derived from) the notion of appearances.

398 Indeed, as we shall see in the next chapter, Meillassoux’s argument largely consists in avoiding this slide into absolute idealism encouraged by the correlationist circle.
Nonetheless, the correlationist circle argument is a version of the Gem. Just as it does not follow that we cannot think things as they are independently of us (or in themselves) because we cannot but think in thought, so it does not follow that we cannot know things as they are independently of us (or in themselves) simply because there are conditions of knowing. I have argued that the metaphysical interpretation of Kant’s transcendental distinction does indeed engage in the fallacious reasoning characteristic of the Gem because even if we add the qualification that the conditions of our knowing (and experiencing) the world are underpinned or framed by specific a priori forms of intuition then the claim that we can know things only as they appear (and not as they really are) does not follow. In contrast, when we employ Allison’s entailment argument and take the notion of things in themselves to refer to the consideration of objects in abstraction from (or as they are not according to) the transcendental framework of appearances (which is to say, as they are non-spatiotemporal and, hence, as they do not appear according to the categories of the understanding) then, by definition, we can know nothing of objects as they are in themselves, even if in transcendental reflection we can make claims about objects considered as they are in themselves.

Allison’s epistemological interpretation of Kant’s transcendental distinction is significantly bolstered (and responds to the charge of triviality) when Kant’s Copernican revolution is understood as a response to the scepticism and dogmatism generated by assuming a theocentric model of knowledge and a transcendental realist approach to its attainment. For Allison, Kant’s point is that, in contrast to an anthropocentric model of knowledge, the theocentric model of knowledge indexes knowledge of the world and its furniture as they are not conditioned by, or as they are not according to, an intuitive framework; and thus as they do not appear. As we have seen, although we can deploy the categories of the understanding in transcendental reflection to generate determinations about objects considered as they are in themselves (as a contrast to objects considered as appearances) the categories of the understanding can yield genuine knowledge of objects only as they appear. Hence, we can have

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399 By explicitly grounding the distinction between subject and object in the subject Fichte attempts to develop a transcendental idealism that more clearly avoids the dogmatism and incoherence Jacobi identifies in the idea that things in themselves cause sensation. In so doing, Fichte develops a version of the correlationist exteriority: although the self ‘must necessarily posit an absolute outside … (a thing-in-itself)’, insofar as this outside is posited by the self it remains an outside for the self. The upshot is that, for Fichte, the notion of the thing in itself is contradictory; it is both for the self (insofar as it is posited by the self) and indexes that which is outside or not for the self. The question of whether Hegel is right to complain that Fichte’s doctrine of Anstoss and feeling simply reproduces the dogmatic claim that things in themselves cause sensations can be here left aside.
no genuine knowledge of objects as they are in themselves. In his reply to Guyer, Allison emphasises that the notion of the thing in itself, conceived in transcendental reflection, is entailed by the restriction of both sensibility and the categories of the understanding to things considered as they appear (which, he says, ‘just is transcendental idealism’). Whereas the notion of appearances means objects construed as falling under the categories insofar as they are limited by conditions of sensibility (i.e. our intuitive framework), the notion of things in themselves means objects considered as falling under the categories insofar as they are not limited by conditions of sensibility (i.e., as they are not according to any intuitive framework), which is why the concept of things in themselves is the concept of an object as ‘cognized by a “pure understanding”’, and not, as Guyer and others suggest, the concept of things as they really are. Indeed, in his reply to Ameriks, Allison argues that it is a mistake to view the relationship between things considered as they are in themselves and things considered as appearances in terms of relative ontological status. Not only does downgrading appearances to a lesser reality (or even unreality) conflict with Kant’s ‘robust form of empirical realism’ but also, as the example of freedom versus determinism is intended to demonstrate, it assumes the transcendentally realist thesis that things in themselves just are the ‘ultimate, genuine’ nature of things, as Ameriks puts it. On this assumption, things in themselves are how things really are; they alone are the real ‘truth or fact of the matter’. In contrast, for Allison, Kant’s revolution consists in reframing the ontological distinction between appearances and things in themselves as a perspectival distinction pertaining to the correlative a priori epistemic and intuitive conditions under which things are experienced and understood. In other words, for Allison, Kant replaces the ‘proud’ ontological question of what fundamentally exists, with the ‘modest’ question of the epistemic-intuitive conditions under which things appear and can be known. Accordingly, the lesson of Kant’s revolutionary reply to the challenge of dogmatism and scepticism is that any and all knowledge of the world that we (or any other discursive intellect) could obtain is knowledge of appearances because knowledge (for such beings) is discursive: it requires an epistemic framework comprising the application of rules to something given (e.g., a

400 Wood, Guyer, Allison, ‘Debating Allison’, 36. The notion of the thing in itself is also required in order to constrain reason’s ambit and avoid the delusion entailed by transcendental illusion. Without the restriction of the scope of the categories to the a priori conditions of sensibility, reason compels the understanding towards the dogmatism characteristic of rationalist metaphysics. Conversely, if sensibility is understood to restrict possible knowledge without recognition of the a priori formal conditions of sensibility (i.e., space and time) we are led to empiricist scepticism. Kant’s transcendental idealism affords legitimate a priori knowledge of objects precisely by restricting both sensibility and the categories to objects considered as appearances (i.e. as conditioned by our forms of intuition). The issue of transcendental illusion will be taken up in Chapter 7.
sensory manifold). In broad terms, experience and knowledge of appearances consists in the application of a formal, rule-governed framework (e.g., the categories of the understanding) to some thing (or class of things) pre-ordered by some basic form or forms of intuition and taken or sensed by some being as an object or phenomenon. Thus, we could speculate that there may be rational beings who do not experience time and space because their forms of intuition are in six dimensions. What appears to these beings through their form or forms of intuition and their sensory faculties combined with the application of a set of rules or categories of the understanding will provide them with the basic framework by which they will produce knowledge of the universe. In contrast, to know things as they are in themselves (as God might) would be to know things as they are not according to any such intuitive-epistemic framework. So defined, knowledge of things as they are in themselves has the air of a contradiction in terms. For although God, an infinite rational being, might know things in themselves, it is not clear what knowledge so construed could be.

Before concluding by setting out the central implications that the epistemological reading of Kant’s idealism have for Meillassoux’s argument in After Finitude, it should be noted that, when construed epistemologically, Kant’s correlationism can be characterised as strong, precisely in the sense that what can be claimed about things considered as they are in themselves is always correlated with the formal conditions of our knowing. Indeed, on Allison’s interpretation, not only are Kant’s determinations about things considered as they are in themselves – about things considered in abstraction from (and, in that sense, correlated with) our forms of intuition – but also that, insofar as the notion of things in themselves can be considered at all, that notion remains tied to the pure categories of the understanding.

Thus, the epistemological model of things considered as they are in themselves is things considered according to the categories but without the scope restriction entailed by sensible intuition. So construed, the notion of things in themselves is indeed the notion of things in

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401 There is an interesting question about the extent to which these rules could be different from those of Kant’s categories. According to Marcel Quarfood (2004, 28–29) Kant is ambiguous on this score.

402 The basic issue is that although we can conceive of what it means for Ann to know something about the universe and its furniture we cannot conceive of what it might mean for God to know, or even if it means anything at all.
themselves “for us” (and rational beings in general) insofar as it is the notion of things in themselves considered according to the pure categories of the understanding. Nonetheless, precisely because such knowledge would entail the unrestricted application of the categories, we can have no genuine knowledge of things as they are in themselves, which is to say, as they are apart from our forms of intuition and, thus, as they would be for a purely intellectual intuition (e.g., God). The upshot of this is that although appearances (things as they are “for us”) must be conceived as grounded on things in themselves (things as they would be for God, say) we can know nothing at all of things as they are independently of empirical reality.

In fact, Kant’s correlationism also reflects something of the so-called two-step argument. Following his discursivity thesis, the scope restrictions of both sensibility to the understanding and the understanding to sensibility entails not only that what we experience is “always-already” the world “for us” but also that ‘when we think of a property as belonging to the world in itself … this property is revealed to be essentially tied to our thinking of the world’. However, what Meillassoux does not see is that, for Kant, when we think of a property as belonging to the world in itself this thought is essentially untied to our experience of the world.

If I am right that, in contrast to the traditional reading (and rejection) of Kant’s determinations about things in themselves, Allison’s interpretation is sound then there are good reasons to both reject Meillassoux’s critique of Kant’s correlationism and to concede that Kant is right to conclude that we cannot know things as they are in themselves. In this chapter I have argued that Meillassoux’s critique of Kant’s argument relies not only on the Gem, but also on the assumption that Kant’s claims about things considered as they are in themselves are dogmatic, metaphysical claims about ‘the absolute’. For Meillassoux, these claims both contradict Kant’s view that things in themselves are unknowable and evidence a failure to strictly adhere to the correlationist circle argument. In contrast, I have argued that neither charge is true. Allison’s interpretation provides a robust framework through which to view Kant as consistently maintaining that things in themselves are unknowable and as consistently remaining within his system of transcendental reflection. That is to say that although Kant fails to adhere to the correlationist circle (because he does not enter it in the first place) he remains within the “circle” of conceiving of appearances and things in themselves as distinct but correlated

403 AF, 4.
epistemological-intuitive frameworks. Kant’s radical reply to the challenge of dogmatism and scepticism consists in the argument that the warrant for our knowledge claims about the universe and its furniture is grounded on the application (and restriction) of rules, underpinned by reason, to the material of sensation conditioned by \textit{a priori} forms of human intuition. Now, although the loss of the Great Outdoors may seem a high philosophical price to pay to avoid dogmatism and scepticism, it seems to me that Kant’s argument demonstrates that nothing of significance is lost, not least because, despite its limitations, our empirical reality is neither less nor more real than any other.

In the next chapter I turn to Meillassoux’s efforts to defend correlationism against a slide into Hegelian idealism through the transformation of the former in to speculative materialism.
CHAPTER FOUR:
STRONG CORRELATIONISM AND ITS ENEMIES

Philosophy is the invention of strange forms of argumentation, necessarily bordering on sophistry.⁴⁰⁴

Introduction

I have shown that the groundwork underpinning Meillassoux’s argument in *After Finitude* is flawed. Although that conclusion lies at the heart of my critique of Meillassoux’s argument, in this chapter it must be put aside in order to focus on the argument by which he attempts to breach the correlationist circle and thereby establish knowledge of a ‘primary absolute’ (specifically the necessity of contingency) upon which the ‘absolute reach’ of mathematics might be established and knowledge of the “literal meaning” of ancestral claims vindicated. Let us recall the premises and conclusions upon which that argument relies:

- Correlationism is fundamentally incompatible with ancestral statements generated by empirical science. Such statements can only be understood as providing knowledge of things as they are in themselves: they cannot be made relative to, or “for” us.
- However, that conclusion is incompatible with the correlationist circle argument, according to which we can only think that which is “for us”. Any attempt to think that which is in itself, or an absolute, is undermined by the correlationist circle because even the thought of the in-itself is the in-itself “for us” and thus not in-itself.
- In order to establish that ancestral statements index primary qualities (i.e., the mathematisable properties of objects as they are in themselves) Meillassoux follows the form of Descartes’ argument: he seeks to establish a primary absolute that might underwrite or guarantee that conclusion.
- But that primary absolute cannot be established by appeal to a necessary being, since, following Kant’s critique of (Descartes’ version of) the ontological argument, we cannot prove the existence of such an entity. Furthermore, insofar as the PSR is underpinned by the ontological argument Meillassoux thinks that the failure of the

⁴⁰⁴ AF, 76.
ontological argument leads to the failure of the PSR. If the PSR cannot be grounded in an ontological argument then, he thinks, this also undermines possible proof of causal determinism. As such, according to Meillassoux, any claim based on either an ontological argument, the PSR or causal determinism is dogmatic and runs afoul of the correlationist circle.

- In order to establish a non-metaphysical primary absolute that could underwrite the “literal truth” of ancestral claims Meillassoux must overcome the most robust form of correlationism. Whereas Kant’s purported commitment to an ontological version of the PNC and his claims about things in themselves fail to remain within the correlationist circle, strong correlationism (as developed in Heidegger’s phenomenology and Fichte’s idealism, for example) remains within the circle and thus concludes that the notion of the thing in itself (i.e., that which is not correlated with or “for us”) is either or both meaningless and contradictory. As such, Meillassoux claims, ‘it is this strong model … that we are going to have to confront, since this is the model that prohibits most decisively the possibility of thinking what there is when there is no thought’.405

My focus here is on Meillassoux’s critique of strong correlationism. He attempts to overcome correlationist finitude by transforming strong correlationism into speculative materialism, the core thesis of which is that, necessarily, everything is contingent. He argues that this transformation is the only means by which strong correlationism can address its internal contradiction (maintaining both the insuperability of the correlationist circle and the thesis that that which is unthinkable is not, thereby, impossible) without embracing dogmatism (which is the consequence of the ‘absolutization of the correlate itself’ characteristic of absolute idealism).406 Meillassoux contends that the only way in which the strong correlationist can avoid the absolute idealist conclusion that that which is unthinkable (because not a correlate of thought) is impossible is to concede that that which is unthinkable is really possible. And the only way to accept that is to ‘de-absolutize the correlate’ by endorsing the ‘facticity’ (and hence contingency) of the correlate itself.407 Finally, the only way to do that is by ‘absolutizing facticity’, which is tantamount to embracing the view that, necessarily, all things are contingent;

405 AF, 36.
406 AF, 39.
407 AF, 59.
except, crucially, the necessity of contingency itself. In this way, the correlationist circle is overcome and the correlationist is transformed into the speculative materialist.

Following this proof, Meillassoux derives two specific conditions (or ‘figure[s] of factiality’) governing and limiting this absolute contingency, namely, 1) the absolute (i.e., ontological as well as logical) scope of the PNC; and 2) the necessary existence of something rather than nothing.\textsuperscript{408}

I shall argue that neither Meillassoux’s deduction of the necessity of contingency nor his derivation of the ‘figures of factiality’ succeed. Consequently, I contend that, even if we accept the premises upon which Meillassoux’s central argument is based, we should not accept his conclusions. Although I do not share their support of the correlationist circle argument, I think Thibaut Giraud and Raphaël Millière are right to argue that, when corrected, the strong correlationist position is under no threat of either internal contradiction or a slide into absolute idealism. Consequently, we need not jettison correlationist finitude and embrace speculative materialism.\textsuperscript{409}

**Strong Correlationism and its Enemies**

At its heart Meillassoux’s critique of strong correlationism consists in exploiting a tension between its ‘two decisions of thought’: the ‘primacy of the correlate’ and ‘the facticity of the correlate’.\textsuperscript{410} In short, he argues that in order to avoid the former principle (which, he claims, drives correlationism to absolute idealism) the latter principle (the facticity of the correlate) must be absolutised, that is, it must be transformed into a necessary ontological truth governing all reality: the absolute necessity of contingency. Because this principle is incompatible with the correlationist circle – for we have now established an absolute, i.e., a necessary truth about things as they are in themselves – correlationist finitude is overcome. We have, moreover, established the ‘primary absolute’ by which the absolute scope of mathematics might be secured. How does this argument work?

\textsuperscript{408} Ibid., 126.
\textsuperscript{410} Ibid., 36–37.
Let us begin with what Meillassoux claims are strong correlationism’s ‘two decisions of thought’. The first decision, ‘the primacy of the correlate’, is the familiar position that combines the correlationist circle and two-step arguments. Accordingly, for the strong correlationist we can neither experience nor think a world that is not ‘always-already… given-to…an entity capable of receiving this givenness’. Thus, *pace* the weak correlationist position, the strong position maintains that we can neither know nor even think that which is uncorrelated with us or is in-itself. In other words, according to the strong correlationist model, the thought of the thing in itself is contradictory. This position returns us to Hegel’s critique of Fichte. If, as Fichte argues, the notion of the thing in itself is a contradiction in terms (i.e., something posited by the self, and hence ‘in the self’ but which ‘ought not to be in the self’) then it would seem prudent to reject it finally as incoherent and dogmatic, and embrace a more consistent idealism. Meillassoux characterises the slide from correlationism to absolute idealism as an ‘absolutization of the correlation itself’ and he contends that it presents a greater challenge to strong correlationism than either naïve (i.e., direct) realism or weak correlationism. ‘How,’ asks Meillassoux ‘is one to legitimate the assertion that something subsists beyond our representations when one has already insisted that this beyond is radically inaccessible to thought?’

According to Meillassoux, an ‘absolutization of the correlation itself’ can be identified in those philosophies that maintain that there is nothing beyond or outside ‘the relation between subject and object, or some other correlation deemed to be more fundamental’. The upshot of this absolutising of the correlate is the position that ‘nothing can be unless it is some form of relation-to-the-world’. He claims that such an approach can be identified in a range of philosophies:

A metaphysics of this type may select from among various forms of subjectivity, but it is invariably characterized by the fact that it hypostatizes some mental, sentient, or vital term: representation in the Leibnizian monad; Schelling’s Nature, or the objective subject-object; Hegelian Mind; Schopenhauer’s Will; the Will (or *Wills*) to Power in Nietzsche; perception loaded with memory in Bergson; Deleuze’s Life, etc. Even in

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411 Ibid.
413 AF, 37.
414 Ibid., 38.
415 Ibid.
416 Ibid., 37.
those cases where the vitalist hyponostatization of the correlation (as in Nietzsche or Deleuze) is explicitly identified with a critique of ‘the subject’ or of ‘metaphysics’, it shares with speculative idealism the same twofold decision which ensures its irreducibility to naïve realism or some variant of transcendental idealism.  

Meillassoux characterises these philosophies as variants of ‘subjectalism’ because in each case – whether idealist or vitalist – ‘some mental or vital term’ is hyponostasised.  

Now, the exemplar of this ‘absolutization of the correlation itself’ is Hegel’s idealism, since Hegel hyponostasizes the subject-object correlation in the form of mind or Geist. Thus, according to Meillassoux, ‘Hegelian idealism is obviously the paradigm of such a metaphysics of the Subject thought as Absolute.’

Frederick Beiser’s characterisation of Hegel’s ‘objective idealism’ as contrasted with Fichte’s and Kant’s purported ‘subjective idealism’ helps to clarify Meillassoux’s claim:

Kant’s and Fichte’s subjective idealism maintains that the form of experience derives from the transcendental subject, even though the matter of experience is given … [O]bjective idealism grew out of subjective idealism by developing objective strands of thought already implicit within it. Objective idealism took its starting point from the analysis of experience in subjective idealism. Both Kant and Fichte had claimed that the very possibility of self-consciousness depends upon the universal and necessary forms of experience. The subject could know itself, attribute ideas and actions to itself, and perceive an objective world only by virtue of these forms. Where objective idealism departed from subjective idealism was in its insistence that the subjective is possible only within experience itself. The subject could not be the source and precondition of these forms when its very identity already depended on them. So rather than having priority over these forms, the subject became subsumed under them. According to the objective idealists, the subject and object are both manifestations or instances of these forms, which constitute the absolute or the realm of pure being itself.

417 Ibid.
419 Ibid., 124. Here, Meillassoux clarifies that although subjectalist philosophies emerge from correlationism, they are not themselves correlationist: unlike the correlationist who thinks that an absolute – construed as that which is uncorrelated with thought (and which is, therefore, unknowable or unthinkable) – does or could exist, the subjectalist believes it is possible to think ‘the absolute’. Whether construed as life, will, or Geist, the subjectalist claims that it is possible to think the absolute, i.e., that which encompasses or just is all reality.
420 Frederick C. Beiser, _German Idealism: The Struggle against Subjectivism, 1781-1801_ (Cambridge, MA: Harvard University Press, 2008), 12. As we shall see in the next chapter Beiser’s characterisation of Kant’s idealism as maintaining that ‘the form of experience derives from the transcendental subject’ is ambiguous. For although Kant argues that the categories and forms of intuition have their origin in the transcendental subject, it is not obvious that they ‘are derived’ from the transcendental subject.
Thus, Hegel’s idealism aims to liquidate the distinction between the “for us” and “in-itself”, between appearances and things in themselves (and hence the dualism inherent in Kant’s discursivity thesis or Fichte’s view that something outside – but posited by – the subject affects the subject) by unmooring the forms of thought from their grounds in the thinking being (i.e., the transcendental subject) and subsuming both thought and world under a unifying ground: ‘the absolute or the realm of pure being itself’. However, Hegel’s absolute is not the ‘great outdoors’, or thing in itself, construed as that which is other than or not correlated with thought. Rather, for Hegel, the absolute is thought, or, more abstractly, it is idea or reason.421

Meillassoux contends that the argument by which Hegel claims to establish absolute idealism – his absolutisation of the correlate – is underpinned by an effort to demonstrate the ‘unconditional necessity’ of ‘the forms of thought’.422 He claims that, unlike correlationism for which the forms of thought (e.g., the forms of intuition and pure concepts or categories of the understanding in Kant’s idealism) are grounded in the transcendental subject, Hegel’s idealism attempts to absolutise the forms of thought by demonstrating their absolute (or unconditional) necessity. Thus, Meillassoux characterises the central difference between Hegel’s absolute idealism, Kant’s transcendental idealism and the strong correlationist position in the following terms:

Kant maintains that we can only describe the a priori forms of knowledge (space and time as forms of intuition and the twelve categories of the understanding), whereas Hegel insists that it is possible to deduce them. Unlike Hegel then, Kant maintains that it is impossible to derive the forms of thought from a principle or system capable of endowing them with absolute necessity. These forms constitute a ‘primary fact’ which is only susceptible to description, and not to deduction (in the genetic sense). And if the realm of the in-itself can be distinguished from the phenomenon, this is precisely because of the facticity of these forms, the fact that they can only be described, for if they were deducible, as is the case with Hegel, theirs would be an unconditional necessity that abolishes the possibility of there being an in-itself that could differ from them… Thus absolute idealism and strong correlationism share an identical starting point – that of the unthinkable of the in-itself – but then go on to draw two opposite conclusions from it – that the absolute is thinkable or that it is unthinkable, respectively.423

When unpacked, this dense and important passage articulates the following claims:

421 I briefly address Hegel’s critique of Kant’s idealism in the next chapter.
422 AF, 38.
423 Ibid.
• Kant’s transcendental arguments for the forms of intuition and the categories of the understanding should be understood as descriptions; as revealing or deriving ‘primary facts’ about experience and the objects therein.

• Hegel, in contrast, deduces the ‘forms of thought’ in a ‘genetic sense’ which means that he deduces the categorial structure of ‘being as such’.

• For Kant the ‘forms of thought’ cannot be deduced (in the ‘genetic sense’) from ‘a principle’ that demonstrates their ‘absolute necessity’. According to Meillassoux, this means that, for Kant, ‘the forms of thought’ have the quality or property of facticity because they are at best contingently necessary.

• And it is this property of facticity Meillassoux claims that allows for the distinction between ‘the realm[s]’ of appearances and things in themselves. If ‘the forms of thought’ could be deduced (in the genetic sense) then they would be unconditionally necessary (à la Hegel) and therefore apply to ‘being as such’.

• Thus, the upshot of absolute idealism is that the distinction between appearances and the in itself is abolished, because ‘being as such’ is governed by necessary or unconditional ‘forms of thought’.

• Both strong correlationism and absolute idealism agree that the in itself, construed as something not governed by the ‘forms of thought’ is unthinkable, but the former does not thereby conclude that ‘the absolute’ is thinkable, because it maintains ‘the facticity’ of ‘the forms of thought’.

On one level Meillassoux’s approach is straightforward. His claim is that, insofar as Kant merely ‘describes’ the ‘forms of thought’ (i.e., the forms of intuition and the pure concepts – or categories – of the understanding) his weak correlationist position grants that things as they are not correlated with these forms (i.e., things in themselves or that which is ‘absolute’, to use Meillassoux’s expression) might be other than how they are “for us”, i.e., not according to these forms of thought. In contrast, because Hegel’s ‘genetic’ deduction of the forms of thought is supposed to proceed from thought alone, it purports to demonstrate that everything (i.e., ‘being as such’) is necessarily governed by these forms of thought. On another level, however, Meillassoux’s approach is not at all straightforward. For, on closer inspection, it
seems that Meillassoux has seriously misrepresented Kant’s Transcendental Deduction and also presupposed a highly assumptive and problematic notion of absolute necessity. Indeed, it seems that Meillassoux has also mischaracterised both the thrust of Hegel’s critique of Kant’s idealism and the import of Hegel’s own deduction of the categories. The passage quoted above, and the philosophical and interpretive issues to which it gives rise, are a central focus of Chapter 5. Here, however, the majority of this passage and these issues can be set aside, because however crucial to the overall assessment of Meillassoux’s argument (and his critique of Kant’s idealism), they are not essential to the exposition and evaluation of the specific argument by which he attempts to deduce the necessity of contingency, and in so doing overcome correlationist finitude.

Absolutising Facticity: Meillassoux’s Dialogue, and the Principle of Unreason

Let me start with the claim that absolute idealism and strong correlationism ‘share an identical starting point – that of the unthinkability of the in-itself – but then go on to draw two opposite conclusions from it – that the absolute is thinkable or that it is not thinkable, respectively’. In the next sentence he contends that ‘[i]t is the irremediable facticity of the correlational forms which allow us to distinguish both claims in favour of the latter.’

So, although both the strong correlationist and absolute idealist maintain that ‘to be is to be a correlate’ and, hence, that ‘anything that is totally a-subjective [i.e., not a correlate] cannot be’ they differ because the former (the strong correlationist) maintains a scope restriction of this claim, whereas the latter ‘absolutizes’ the correlation. In effect, the strong correlationist denies that the ‘unthinkability of the in-itself’ is sufficient to rule out the possibility that ‘there could be an in-itself that differs fundamentally from what is given to us.’ That is, for the

424 In order to explain why and to set the stage for a more thorough evaluation of Kant’s argument against Meillassoux’s critique, in the next chapter I take an important detour into Kant’s transcendental deduction of the categories. Setting out the core features of Kant’s deduction is not only central to developing a more robust account and defence of his idealism but it is also crucial for evaluating Meillassoux’s contentions that: 1) Kant describes (and does not deduce) the forms of thought; 2) Kant’s categories are not endowed with absolute necessity; and 3) if they were genetically deducible (from an absolutely necessary first principle) Kant would be forced to conclude that things in themselves could not be different to appearances. Drawing on my exposition of Kant’s Transcendental Deduction I argue that Meillassoux is mistaken on all three counts.

425 AF, 38.

426 AF, 28, 38.

427 Ibid., 39.
strong correlationist, the correlationist circle cannot be ‘absolutized’, so that the rules governing what is “for us” cannot be known to pertain to, or to restrict, all possible reality. Thus, although the strong correlationist maintains that ‘to be is to be a correlate [of thought or “for us”]’, they must also somehow deny that this entails that nothing could be that is not a correlate of our thought. According to Meillassoux the only way this can be maintained is by absolutising the strong correlationist’s second decision: the facticity of the correlate.

We must establish a clearer conception of the notion of facticity in Meillassoux’s argument and why the strong correlationist holds the view that the correlate has the property or quality of facticity. Facticity, according to Meillassoux, ‘express[es] thoughts inability to uncover the reason why what is, is’ or ‘the impossibility of providing an ultimate ground for the existence of any being’. This result follows from Meillassoux’s claims, discussed in Chapter 2, that the refutation of the ontological argument destroys the PSR. That is, facticity expresses the view that, because we cannot demonstrate that there must be a sufficient reason that accounts for things (because the ontological argument is false) we cannot demonstrate the necessity of any matter of fact. Therefore, ‘we can attain conditional necessity, never absolute necessity.

In this respect, all we know is that things are thus and so, or that some things exist and others do not. Indeed, because facticity rules out knowledge of any absolute, ‘we can no longer maintain, as does the subjectivist [i.e., absolute idealist] that [the correlation] is a necessary [or absolute] component of every reality’ even if ‘any attempt to conceive the non-being of a subjective correlation results in a performative contradiction’ since whatever we think or conceive is a correlate of our thought, or “for us”. Thus, although ‘the facticity of the correlate’ follows from the correlationist circle’s prohibition of thinking that which is in-itself or that which is absolute, it also prohibits the absolutisation of the correlate characteristic of absolute idealism. However, the strong correlationist’s commitment to the claim that we cannot prove the necessity of any matter of fact (whether it is the fact of the correlation or anything else) can neither demonstrate the impossibility of absolute idealism, nor overcome

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428 Ibid., 52; TWB, 8.
429 It will be recalled that Meillassoux uses Kant’s (and Hume’s) argument to undermine the ontological argument and does not rely on the strong correlationist’s straightforward embrace of the correlationist circle to repudiate any claim to know that which is not a correlate of thought.
430 TWB, 8.
431 Ibid.
correlationist finitude.

In order to establish these claims, Meillassoux attempts to convert the epistemological limitation entailed by our inability to demonstrate that anything must be or must remain thus and so into an ontological claim, according to which ‘there is no reason for anything to be or to remain thus and so rather than otherwise, and that this applies as much to the laws that govern the world as to the things of the world’.\(^{432}\) In other words, Meillassoux wants to demonstrate that facticity is not simply an epistemological limit expressing ‘our essential ignorance about either the contingency or necessity of our world and its invariants’ but that it is, in fact, a ‘real property whereby everything and every world \(is\) without reason and is thereby \textit{capable of actually becoming otherwise without reason}’.\(^{433}\) He contends that absolutising facticity would not only block the strong correlationist’s slide into absolute idealism (because it would demonstrate, \textit{pace} the absolute idealist, that the correlate, like everything else, is a contingent fact) but, crucially, that it would also achieve the aim of undermining correlationism, as it would prove the absolute necessity of contingency. The \textit{prima facie} problem here is that correlationism itself stands in the way of this conclusion, for ‘the correlationist circle undermines the thesis of the absolute contingency of everything just as effectively as it undermined the thesis of the absolute necessity of a supreme being’.\(^{434}\) How does Meillassoux attempt to get around this problem?

There is, he says, only one way:

\textit{We have to show that the correlationist circle – and what lies at the heart of it, \textit{viz.} the distinction between the \textit{in-itself} and the \textit{for-us} – is only conceivable insofar as it already presupposes an implicit admission of the absoluteness of contingency. More precisely, we must demonstrate how the facticity of the correlate, which provides the basic disqualification of dogmatic idealism as well as dogmatic realism, is only conceivable on condition that one admits the absoluteness of the contingency of the given in general.}\(^{435}\)

We now come to the centrepiece of Meillassoux’s argument in \textit{After Finitude}. Here, Meillassoux attempts to undermine correlationism by establishing the necessity of contingency, i.e., that,

\(^{432}\) AF, 52.
\(^{433}\) Ibid.
\(^{434}\) Ibid. 54.
\(^{435}\) Ibid.
necessarily, anything is possible. He develops this argument through an imagined debate between a dogmatic atheist, a dogmatic theist and a variety of agnostic positions, about the ‘nature of [a future post-mortem].’ Essentially, this is a debate between dogmatic realists, an absolute idealist and a correlationist about the possibility of knowing ‘what there is when one is not’. Despite the dialogue’s complexity, Meillassoux’s argument is fairly straightforward. His central claim is that the hidden premise underlying the argument that prevents correlationism’s slide into absolute idealism is the thesis that, necessarily, everything is contingent. Indeed, according to Meillassoux, this premise underpins the very possibility of the distinction between the “for us” and in-itself.

The argument run as follows:

Both the theist and the atheist simply claim to know the absolute – in this case that there is or is not an afterlife. The former claims to know ‘that our existence continues after death,’ whereas, with equal certainty, the latter claims that death is the end, that ‘our existence is completely abolished by death’. Both positions are undermined by the agnostic-cum-correlationist who claims that because ‘I cannot know the in-itself without converting it into a for-me, I cannot know what will happen to me when I am no longer of this world, since knowledge presupposes that one is of the world’. That is, for the correlationist-agnostic we have no means of knowing the thing in itself. For Meillassoux, the dogmatists ‘are vitiated by the inconsistency proper to realism – that of claiming to know what there is when one is not’.

The subjective idealist enters the scene by arguing that the atheist, theist and agnostic positions are untenable – we should simply ‘cancel out anything lying outside the correlate, including

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436 Ibid., 55.
437 Ibid.
438 Ibid.
439 Ibid.
440 Ibid. While it makes sense to say that one does not know what will happen to one after one’s death (‘when one is not’) the claim that ‘knowing what there is when one is not’ is an ‘inconsistency proper to realism’ requires some disambiguation. Obviously, when one is not, one knows nothing, since one does not exists. In contrast, however, one is clearly entitled to the view that in the absence of one’s existence giraffes would indeed exist, and presumably in the same way that they existed in the presence of one’s existence. The question of what giraffes would be (or indeed whether they would be at all) in the absence of the existence of any and all human beings is very different to the question of what giraffes would be – or whether they would be – if I did not exist. Meillassoux’s contention that claiming to know ‘what there is when one is not [my emphasis] … is inconsistent’ is redolent of an extreme solipsism.
death itself. This is what it means to absolutise the correlate. The agnostic-correlationist reply to this is that the atheist, theist and idealist positions are all dogmatic because each assumes that they can rule out what they take to be unthinkable. Here, the agnostic-correlationist marshals the critiques of the ontological argument and of the PSR, arguing that the atheist, theist and idealist ‘claim to have identified a necessary reason [for their position] … whereas no such reason is available’. 

The final character in Meillassoux’s dialogue is the speculative materialist who begins by accepting the agnostic-correlationist position that, however unthinkable, we cannot rule out the possibility of an afterlife or complete annihilation because ontological impossibility does not follow from inconceivability. Meillassoux notes that although this is a strong counter to the idealist position (which says that there is not and there could not be anything outside of thought) it is not a position that the correlationist can hold coherently. To see why, we need to focus on the difference between idealism and strong correlationism, according to Meillassoux. Harman gives the following example to highlight the difference: ‘The idealist might say “we cannot think a tree existing outside thought, and therefore no tree exists outside thought”. In contrast, ‘the Correlationist might counter with “we cannot think a tree outside thought, and yet such a tree might exist nonetheless”’. However, the problem with the correlationist’s reply to the idealist is that the counter-argument can remain within the correlationist circle only if it is tantamount to the claim that, ‘for me we cannot think a tree existing outside thought, yet such a tree might exist nonetheless for me’. The contradiction here is clear: the correlationist cannot claim both that a tree outside of thought is unthinkable (because such a tree would be uncorrelated with thought) and that such a tree might, nonetheless, be a possible correlate of thought (i.e., thinkable). The only solution is for the correlationist to accept that ‘a tree existing outside of thought … might exist … in spite of my not being able to think it’. That is, pace the idealist, we cannot claim that only what is thinkable is possible.

441 Harman, Philosophy in the Making, 25. In this respect the idealist agrees with the theist that there is no death (construed as the end of thought) but disagrees with the theist’s claim that the afterlife could be radically different to the world we know.
442 The theist rules out death as possible, the atheist rules out the afterlife as possible, and the idealist rules out the possibility of death and the afterlife, construed as that which is different to life.
443 AF, 56. It is worth noting that that it is not obvious that either atheist or theist position is predicated on ‘a necessary reason’. In Meillassoux’s dialogue neither atheist nor theist provide a reason for their positions.
444 Harman, Philosophy in the Making, 27.
445 Ibid.
446 Ibid.
Meillassoux’s point is that correlationism can maintain its separation from, and criticism of, subjective idealism only if it ‘replace[s] the absolute status of the thought-world correlate, not with finitude and ignorance about otherness of the world but with absolute knowledge that the world might be other than we think’. Ultimately, for Meillassoux, the correlationist has no choice but to embrace this ‘absolute knowledge’, because they cannot maintain ‘that there absolutely may be something outside of thought, yet maybe this is absolutely impossible’. Otherwise put, the correlationist ‘cannot be sceptical towards the operator of every scepticism’.

We get a clearer picture of what this means if we return to Meillassoux’s debate about death. Despite denying that the dogmatic atheist or theist can legitimately claim to know what will happen after our deaths (i.e., what there is when we are not), the correlationist will, nonetheless, accept that they could be correct; for, pace the idealist, we cannot demonstrate that what is unthinkable is thereby impossible. According to Meillassoux, this means that the correlationist must hold that both annihilation or eternal life, are, in fact, real possibilities. Now, as above, Meillassoux claims that the only way in which correlationism can admit that these are real possibilities, and not just an incapacity of thought – and in so doing maintain its defence against absolute idealism – is by contradicting its own thesis that all we can know is correlated with our actual or possible thought or experience. In other words correlationism must relinquish the claim that all actual and possible knowledge is a correlate of our thought (or “for us”) and accept that we have ‘absolute knowledge that the world might be other than we think’, as Harman puts it. In order to do this, however, the correlationist must ‘de-absolutize the correlation’. But she can only do this, claims Meillassoux, ‘at the cost of absolutizing facticity’, which, as Brassier puts it, means ‘to assert the unconditional necessity of contingency, and hence to assert that it is possible to think something that exists independently of thought’s relation to it: contingency as such’. This is the heart of Meillassoux’s speculative materialism.

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447 Ibid., 27–28.
448 Ibid., 29.
449 TWB, 9.
451 AF, 59.
452 Ibid; Brassier, Nihil Unbound, 67.
Towards the end of his dialogue Meillassoux brings back the correlationist to launch a last-ditch attempt to maintain the insuperable status of the correlation. Here, the correlationist accuses the speculative materialist of the same dogmatism pertaining to any other position: ‘the speculative thesis is no more certain that those of the realists and the idealists. For it is impossible to give a reason in favour of the hypothesis of the real possibility of every envisageable post-mortem.’ As such, for the correlationist, all three options (the speculative, realist or idealist theses) are simply ‘possibilities of ignorance’. Meillassoux’s reply is that this is a contradiction because, as Harman puts it, ‘the only way the correlationist can hold open the various possibilities is with the tacit claim that the possibilities are absolutely possible … they cannot simply be possibilities for thought or Subjective Idealism will win’. In fact the trouble with the correlationist’s reply is that once it is conceded that ‘it is absolutely possible for the in-itself to be other than the given’ then the correlationist can maintain the ‘possibility of ignorance’ only by ‘thinking as an absolute the possibility…[the correlationist] claim[s] to be de-absolutizing’, namely the contingency of everything. Thus, according to Meillassoux, the only way in which the correlationist can hold that any ‘metaphysical theses about the in-itself’ might be true (despite the fact that there is no way to know) is to embrace the speculative materialist position that all things are, in fact, necessarily contingent. In other words, the absolute necessity of contingency is the ‘operator of every scepticism’; it is the hidden premise upon which the correlationist relies to refute both dogmatic realism and absolute idealism’s absolutisation of the correlate, which is why the correlationist cannot be sceptical towards it. Meilassoux writes: ‘one cannot think unreason – which is the equal and indifferent possibility of every eventuality – as merely relative to thought, since only by thinking it as an absolute can one de-absolutize every dogmatic thesis’. Consequently we are left with two stark choices, only one of which avoids dogmatism:

either I choose – against idealism – to de-absolutize the correlation; but at the cost of absolutizing facticity. Or I choose, against the speculative [materialist] philosopher, to de-absolutize facticity – I submit the latter to the primacy of the correlation (everything I think must be correlated with an act of thought) by asserting this facticity is only true for-me, not necessarily in-itself. But this is at the cost of an idealist absolutization of the correlation … Thus, correlationism cannot de-absolutize both its principles at once.

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453 AF, 57.
454 Ibid., 58.
456 AF, 59.
457 Ibid.
since it always needs one of them in order to de-absolutize the other. As a result, we have two ways out of the correlationist circle: either by absolutizing the correlation, or by absolutizing facticity. But we have already disqualified the metaphysical option by recusing the ontological argument; consequently, we cannot take the idealist path … according to which some determinate entity (Spirit, Will, Life), must absolutely be. It remains for us to follow the path of facticity, while taking care to ensure that its absolutization not lead back to a dogmatic thesis.  

So the only way in which the correlationist can avoid dogmatism is to abandon correlationism and ‘absolutize facticity’. This facticity is absolute because it is not a contingent fact: instead, the facticity of all things is itself a necessary, or absolute, principle. Absolute facticity is not, however, a necessary entity or ‘a variant of the principle of sufficient reason, according to which there is a necessary reason why everything is the way it is rather than otherwise’; rather, it is ‘the absolute truth of a principle of unreason’ according to which ‘there is no reason for anything to be or to remain the way it is; everything must, without reason, be able not to be and/or be able to be other than it is’.  

Meillassoux notes that the ‘principle of unreason’ is an ‘anhypothetical principle’ because although it cannot be deduced from a more fundamental principle, it can be ‘proved by argument … by demonstrating that anyone who contests it can only do so be presupposing it to be true, thereby refuting him or herself’. In this respect it is similar to the PNC. Crucially, however, for Meillassoux it also differs from it; because, following the strong correlationist, the PNC pertains only to what is thinkable, not to what is ontologically possible. In this respect, Meillassoux claims, although both the PNC and the principle of unreason are  

458 Ibid., 60. It is worth highlighting here that Meillassoux’s disqualification ‘of the metaphysical option’ depends on a questionable rendering of Hegel’s absolute (construed as Geist or reason) as a ‘determinate entity’. As Bart Zantavoort (2015, 83) has argued, however, it is not at all clear that Hegel’s absolute can or should be characterised as an entity. Indeed, it is not at all clear than an ‘absolutization of the correlate’ (or of the forms of thought) results in the position that ‘some determinate entity … must absolutely be’.  

459 Ibid.  

460 Ibid., 61.  

461 Here, Meillassoux refers to Aristotle’s claim that the PNC is not susceptible to demonstration or a deductive argument because it must be assumed in any demonstration or argument. It is, therefore, an an- (or non-) hypothetical principle. Aristotle writes:

the most certain principle of all is that about which one cannot be mistaken; for such a principle must be both the most familiar (for it is about the unfamiliar that errors are always made), and not based on hypothesis. For the principle which the student of any form of Being must grasp is no hypothesis; and that which a man must know if he knows anything he must bring with him to his task. Clearly, then, it is a principle of this kind that is the most certain of all principles 1933, 1005b, 160).
non-hypothetical, the former is restricted to thought, while the latter is ‘absolute … because one cannot contest its absolute validity without thereby presupposing its absolute truth’. The principle of unreason is absolute, according to Meillassoux, because ‘it pertains to the “in-itself” as well as the “for-us”’.463

Before turning to what Meillassoux claims are the implications of the principle of unreason, it is worth pausing to register a straightforward but significant problem in his argument. This problem is simply that absolute contingency (or the principle of unreason, or the absolutisation of facticity) does not in fact follow from the strong correlationist’s requirement to concede that we cannot know that what is unthinkable is impossible. In their fine-grained critique of the logic of Meillassoux’s argument, Giraud and Millière identify a subtle but crucial flaw in his characterisation of the strong correlationists’ reply to the absolute idealist.464 Meillassoux contends that although the strong correlationist agrees with the absolute idealist that the thing in itself (that which is not a correlate of thought) is unthinkable, she denies the absolute idealist’s inference that the thing in itself is, therefore, impossible (and hence also the conclusion that there cannot be a thing in itself). Giraud and Millière note that, pace Meillassoux, the strong correlationist need not insist that ‘it is unthinkable that the unthinkable be impossible’ in order to refute the absolute idealist’s claim that the thing in itself is impossible because unthinkable. Instead, ‘what the strong correlationist really has to assert … is [the far weaker claim that] it is conceivable that (P2) [which is the absolute idealist’s claim that “it is not thinkable that there is a thing in itself”] is not true’; or as (Giraud and Millière say) Meillassoux might put it, ‘it is thinkable that the unthinkable be not impossible’.465 Otherwise put,

462 Ibid., 61. Meillassoux summarises this argument in TWB (9):

The thesis of the correlationist – whether explicitly stated or not – is that I can’t know what reality would be without me. According to him, if I remove myself from the world, I can’t know the residue. But this reasoning assumes that we enjoy positive access to an absolute possibility: the possibility that the in-itself could be different from the for-us. And this absolute possibility is grounded in turn upon the absolute facticity of the correlation. It is because I can conceive the non-being of the correlation, that I can conceive of the absolute facticity of everything, that I can be skeptical towards every other kind of absolute.

463 It is absolute because ‘the sceptic is only able to conceive of the difference between the “in-itself” and the “for-us” by submitting the “for-us” to an absence of reason which presupposes the absoluteness of the principle of unreason. (AF, 61).


465 Ibid., 114.
Meillassoux’s contention that the strong correlationist must maintain that ‘it is unthinkable that the unthinkable be impossible’ is unnecessarily strong because the position ‘that everything that is unthinkable is possible’ does not follow from the strong correlationist denial of the (absolute idealist) position that unthinkability entails impossibility.\textsuperscript{466} Instead, according to Giraud and Millière, all the strong correlationist needs to assert is ‘that at least something unthinkable is possible’.\textsuperscript{467} Corrected, then, the strong correlationist’s reply to the absolute idealist is this: The strong correlationist ‘endorses [(1)] that things-in-themselves are unthinkable and (2) ‘that it is thinkable that there is an unthinkable possible proposition – and nothing more’.\textsuperscript{468} Although this might entitle the strong correlationist to suppose that the thing in itself may be possible (because she has denied that what is unthinkable is necessarily impossible) it does not follow that it is in fact possible. Instead, all the strong correlationist is required to maintain is that the proposition that the thing in itself exists ‘may or may not be one of the unthinkable possible propositions whose possible existence is asserted by’ (2), (which states only that ‘it is possible that at least one proposition is unthinkable and possible … without specifying anything about which proposition it would be’; and not that ‘every unthinkable proposition is possible’).\textsuperscript{469} If Giraud and Millière are right to characterise the strong correlationist position in this way – and I think they are – the consequences for Meillassoux’s argument are profound. For although it follows from (1) and (2) that the thing in itself maybe possible, it does not follow that anything is in fact possible. Even if we grant that ‘the inconceivability of something (anything) does not entail its impossibility’ this does not licence the conclusion that everything is in fact possible.\textsuperscript{470} Giraud and Millière conclude that

The source of Meillassoux’s thesis of radical contingency may be this error: from his point of view, the strong correlationist concludes to the possibility of things-in-themselves from their unthinkability…unthinkability becomes, as well as thinkability, a sufficient condition for possibility. Therefore, thinkable or unthinkable, everything is possible! But Meillassoux’s analysis is incorrect: strong correlationism … does not entail that every unthinkable proposition is possible.\textsuperscript{471}

And if strong correlationism does not entail this, then it is under no pressure to embrace the

\textsuperscript{466} Ibid., 121.
\textsuperscript{467} Ibid.
\textsuperscript{468} Ibid., 122.
\textsuperscript{469} Ibid., 123.
\textsuperscript{470} Ibid., 115.
\textsuperscript{471} Ibid., 123.
speculative materialist thesis that, necessarily, all things are contingent. Indeed, as Giraud and Millière note, strong correlationism’s ‘only true conclusion … is agnosticism: metaphysical realism and idealism are equally conceivable, therefore equally possible’. Consequently, Meillassoux is no position to insist that the only means by which the strong correlationist can avoid a slide into absolute idealism is to transcend correlationism and embrace the speculative materialist position according to which, necessarily, all things are contingent. Instead, the strong correlationist can avoid the absolutisation of the correlate characteristic of absolute idealism by simply affirming that some unthinkable propositions are in fact possible, without specifying which. In short, the strong correlationist need not breach the correlationist circle by endorsing speculative materialism, i.e., the necessity of the contingency of all things.

Speculative Materialism: Hyper-Chaos and the Figures of Factuality

As we have seen, according to Meillassoux, the principle of unreason entails that ‘there is absolutely no ultimate Reason’ for anything. Following his critique of the ontological argument and the PSR, the absence of an ultimate reason for anything entails ‘the absolute necessity of everything’s non-necessity’ which, he says, is tantamount to the ‘absolute necessity of the contingency of everything’. In fact, for Meillassoux, the absence of an ultimate reason entails that ‘there is nothing beneath or beyond the manifest gratuitousness of the given – nothing but the limitless and lawless power of its destruction, emergence, or persistence’, i.e., absolute contingency.

Meillassoux contends that this ‘absolute necessity of the contingency of everything’ is the non-metaphysical ‘primary absolute’ he sought to establish. It is non-metaphysical because it does not posit a necessary entity, but it is a primary absolute because it is the ultimate structure or logic underpinning the universe. He refers to this structure or logic as ‘in effect … nothing other than an extreme version of chaos, a hyper-Chaos’. In an evocative passage he

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472 Ibid., 129. Because they endorse a version of the correlationist circle argument Giraud and Millière contend that, when corrected, the strong correlationist position is not only coherent but correct: ‘there is’, they conclude ‘no possible overcoming of this kind of moderated scepticism, if one wants to avoid dogmatism as Meillassoux does’, and that consequently, they ‘are committed to giving[ing] up the absolute – again’ (Ibid., 129).
473 AF, 62.
474 Ibid, 63.
475 Ibid, 64.
characterises hyper-Chaos in the following terms:

[Hyper-Chaos is] capable of destroying both things and world, of bringing forth monstrous absurdities, yet also of never doing anything ... of engendering random and frenetic transformations, or conversely, of producing a universe that remains motionless ... [In it] we see an omnipotence equal to that of the Cartesian God, and capable of anything, even the inconceivable; but an omnipotence that has become autonomous, without norms ... devoid of the other divine perfections, a power with neither goodness nor wisdom ... We see something akin to Time, but a Time that is inconceivable for physics, since it is capable of destroying without cause or reason, every physical law ... [This Time] is not the eternal law of becoming, but rather the eternal and lawless possible becoming of every law. It is a Time capable of destroying even becoming itself by bringing forth, perhaps forever, fixity, stasis, and death. 476

Meillassoux notes that this grand ontological truth about the ultimate nature of the universe – that anything at all is possible because the only necessity is absolute contingency – seems to confront two problems: first, it seems to confer little advantage over the strong correlationist view that ‘the in-itself could actually be anything whatsoever without anyone knowing what’; and second it is not obvious that hyper-Chaos can provide any grounds for a proof of the ‘absolute reach of mathematics’ required to justify ancestral claims. 477 In reply to the first issue, Meillassoux argues that the central difference between his position and strong correlationism is that ‘we know two things that the [correlationist] sceptic did not ... that contingency is necessary and hence eternal ... [and] ... that contingency alone is necessary’. 478 From this knowledge, he claims that we can ‘infer an impossibility that is every bit as absolute’, namely, that hyper-Chaos ‘will never be able to produce ... something that is necessary ... [i.e., something that] cannot but exist’. 479 The reason for this, argues Meillassoux, is simply the ‘impossibility of necessity’ entailed by the principle of unreason. 480 The ‘impossibility of necessity’ provides the basis for a reply to the second issue. Here, Meillassoux’s strategy consist in an effort to identify the ‘determinate conditions of chaos’, to clarify what can be said about entities in hyper-Chaos, in order to establish the grounds upon which ‘the absolute scope of

476 Ibid, 65.
477 Ibid., 65, 30. Meillassoux puts the issue this way in TWB (11): ‘We now have an absolute that is, I believe, able to resist correlationism, but this absolute seems to be the contrary of a rational structure of being: it is the destruction of the principle of reason, through which we try to explain the reason for facts. Now, it seems, there are only facts, and no more reason. How can we hope to ground the sciences with such a result?’
478 AF, 65.
479 Ibid, 66.
480 Ibid, 68.
mathematics’ might be secured.  

The two fundamental conditions of hyper-Chaos or the ‘specific conditions of facticity’ are derived from the impossibility of necessity. These ‘figures of factuality’ are 1) the absolute (which, for Meillassoux, means ontological as well as logical) scope of the PNC and 2) the necessary existence of something rather than nothing. Both constitute constraints governing possible entities, even in hyper-Chaos. Meillassoux’s argument for the absolute scope of the PNC runs as follows: if a contradictory entity existed it would be both what it is and what it is not in every possible respect. Now, such an entity may be unthinkable, but why is it ontologically impossible? Meillassoux’s answer is that such an entity ‘would … prove incapable of undergoing any sort of actual becoming’ or alteration because it is ‘always-already whatever it is not.’ He continues, ‘[s]uch an entity would be tantamount to “a black hole of differences”, into which all alterity would be irremediably swallowed up’. And because ‘one of the defining characteristics of such an entity would be to continue to be even were it not to be … a really contradictory being … would be perfectly eternal ’ and hence necessary. That conclusion, however, is ruled out by his thesis that everything is contingent. Thus, Meillassoux’s proof of the absolute scope of the PNC is that ‘a contradictory entity is absolutely impossible, because if an entity was contradictory, it would be necessary’. This is an odd argument. It relies on a raft of assumptions, not least of which is the view that a contradictory entity is everything that it is not. That is, Meillassoux seems to hold that any contradictory entity is maximally or essentially contradictory. However, as Giraud and Millière note, there is no requirement to concede that a contradictory entity would be incapable of change:

(a) A contradictory entity – say, a round square – is perfectly capable of change: it could acquire a new property, for instance “being red”, or swap one of its properties (e.g. by becoming a triangular square).

(b) Even an entity that would possess, per impossible, every possible properties, could still be submitted to change by losing one of its properties. One could further argue that losing the property of being F and acquiring (or keeping) the property of being

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481 TWB, 12.
482 Ibid., 11.
483 Ibid., 67.
484 Ibid., 69.
485 Ibid., 70.
486 Ibid., 67.
non-F are not equivalent.\textsuperscript{487}

While the first example demonstrates that a less-than-maximally contradictory entity might of course change, the second demonstrates that even a maximally contradictory entity (one with all possible properties) might change by losing a particular property. Consequently, it is not at all obvious that a contradictory entity must be a necessary entity. Meillassoux’s argument becomes a little clearer when, in reply to possible objections, he addresses and dismisses what he takes to be the challenge posed by paraconsistent logic, according to which, he says, ‘some but not all contradictions are true’.\textsuperscript{488} He notes that for paraconsistent logic ‘contradiction is logically thinkable so long as it remains “confined” within limits such that it does not entail the truth of every contradiction’. Consequently paraconsistent would indeed grant that ‘it is possible to conceive of a world wherein one particular contradiction would be true’.\textsuperscript{489} Nonetheless, in a brief and opaque critique, Meillassoux argues that paraconsistent logics ‘were not developed in order to account for actual contradictory facts, but only in order to prevent computers … from deducing anything whatsoever from contradictory data … because of the principle of \textit{ex falso quodlibet} [i.e., the principle of explosion, according to which anything follows from a contradiction].’\textsuperscript{490} His contention is that, insofar as paraconsistent logics are concerned with ‘\textit{statements about the world, never with real contradictions in the world}’, they challenge neither his thesis that a contradictory entity would be impossible (because necessary) nor the principle of explosion. The first thing to note is that his characterisation of paraconsistent logics fails to address its metaphysical counterpart, dialetheism, according to which contradictory entities are indeed possible. As Millière points out, Graham Priest explicitly defends dialetheism, arguing that contradictory entities are not only logically possible but also that they do in fact exist.\textsuperscript{491} What is more, even if we accept that paraconsistent logics have no bearing on possible or actual entities, it is not at all clear why this counts as evidence for Meillassoux’s contention that any (even minimally) contradictory entity would be incapable

\begin{footnotes}
\item[487] Giraud and Millière. ‘Creeping Up on Things from Behind’, 117–118.
\item[488] AF, 77.
\item[489] Ibid., 77–78.
\item[490] Ibid., 79.
\item[491] Raphaël Millière, ‘Principle of Non-Contradiction’ in \textit{The Meillassoux Dictionary}, ed. Peter Gratton and Paul J. Ennis (Edinburgh: Edinburgh University Press, 2015), 141. In \textit{In Contradiction} (2007) Priest argues that time, motion and change all exhibit real contradiction (see chapters 11, 12 and 13) and in ‘Sylvan’s Box’ (1997) he aims to demonstrate that the existence of an inconsistent object (a box which is both observably empty and non-empty) can be reasoned about and would not entail the principle of explosion.
\end{footnotes}
of change. Although he does not spell it out, the structure of Meillassoux’s critique of paraconsistent logics suggests that he endorses the principle of explosion (i.e., that a ‘real’ contradiction would imply everything) which is why even a minimally contradictory entity (e.g., something green and not green in the same respect) would entail ‘a black hole of differences’. In the absence of concrete textual support, however, this inference must remain inconclusive.⁴⁹² Nonetheless, we can conclude that, irrespective of the validity of paraconsistent logics, dialetheism or the principle of explosion, Meillassoux has not proven that a contradictory entity (whether wholly inconsistent or minimally contradictory) is impossible because it would be unchangeable and, therefore, necessary – even if we concede that a necessary entity is impossible.

We can now turn to Meillassoux’s second figure of factuality: the necessary existence of something rather than nothing. He seeks to answer this question in order to prove that ‘the thing in-itself actually exists, and not just the phenomenal realm of the “for-us”’.⁴⁹³ ‘It is’, he says, ‘a matter of demonstrating that it is absolutely necessary that the in-itself exists, and hence … cannot dissolve in to nothingness, whereas on the contrary, the realm of the “for-us” is essentially perishable, since it remains correlative with the existence of thinking and/or living beings’. In fact, he says, ‘[w]e must demonstrate that everything would not lapse into nothingness with the annihilation of living creatures, and the world in-itself would subsist despite the abolition of every relation-to-the-world.’⁴⁹⁴

Meillassoux’s proof begins by setting out two interpretations of the ‘non-facticity of facticity’ or the thesis that the contingency of all things is not itself a contingent fact but a necessary truth. ‘The weak interpretation of this principle is … if something is, then it must be contingent’. By contrast, the ‘strong interpretation … maintains … both that things must be contingent and that there must be contingent things’.⁴⁹⁵ He aims to justify the strong

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⁴⁹² Although Meillassoux repeats his contention that a contradictory entity would be necessary (and, therefore, impossible) in other works, he nowhere provides an explicit treatment of the relationship between contradictory entities and the principle of explosion. It is worth noting, however, that if this is Meillassoux’s approach then it is not clear that he is required to deploy the principle of unreason (according to which a necessary entity is impossible) to undermine the possibility of a contradictory entity – the principle of explosion would seem to suffice.

⁴⁹³ AF, 71.

⁴⁹⁴ Ibid.

⁴⁹⁵ Ibid., 73.
interpretation by disproving the weak interpretation. The problem with the weak
interpretation, according to Meillassoux, is that it renders facticity a fact, and not an absolute
necessity, because ‘if nothing existed, then nothing would be factual, and consequently there
would be no facticity’. Otherwise put, there must be some contingent facts in order for
contingency to be necessary. Meillassoux addresses two possible objections to this reply: 1)
that ‘facticity might not obtain in the absence of the actual existence of factual things’ and 2)
‘why … not say that contingency could subsist as the contingency of negative facts alone?’ In
reply to the first issue, he argues that this would be to ‘doubt the absoluteness of facticity’
which cannot be done without ‘immediately re-instating it as an absolute’. And in reply to the
second, he argues that negative facts are possible only if there are ‘positive facts,’ thus, ‘we
have to say that it is necessary that there always be this or that existent capable of not existing,
and this or that inexistent capable of existing’. Consequently, Meillassoux’s conclusion to
Leibniz’s question of why there is something rather than nothing is that ‘it is necessary that there
be something rather than nothing because it is necessarily contingent that there is something rather than
something else’.

Now, whatever the merits of his replies to possible objections to the strong interpretation
(according to which ‘things must be contingent and … there must be contingent things’) his
critique of the weak interpretation (according to which the contention ‘if something is, then it
must be contingent’ renders facticity a fact and not an absolute necessity) is far from
conclusive, principally because it is not obvious that facticity is any less absolute in the absence
of facts. If facticity is supposed to be a logical principle of ‘the possible as such’, (i.e., a logical
principle governing possibility) then it is not at all clear that its absolute status depends on the
existence of anything; just as the fact that, necessarily, triangles have three sides does not
depend on the existence of triangles (or even the existence of minds capable of reasoning
about shapes). Indeed, it is not at all clear that any logical principle is any less absolute in the
absence of objects or facts to which that principle pertains. This is why, as Giraud and Millière
note, ‘[i]t may be true that “necessarily everything is contingent”, even if there is nothing’. Their
contention is that Meillassoux’s argument is ‘obviously wrong’ because ‘saying that

496 Ibid., 74.
497 Ibid., 75.
498 Ibid., 76.
499 Ibid.
500 Giraud and Millière. ‘Creeping Up on Things from Behind’, 118.
everything is contingent does not imply that, necessarily, some contingent being exists’. Consequently, ‘the theorem “anything is possible” … does not entail any positive answer to Leibniz’s question: it may be true that anything is possible even if nothing is actual’.

Conclusion

Despite its considerable ingenuity the central argument in After Finitude – the overcoming of correlationist finitude via the transformation of strong correlationism into speculative materialism – is seriously flawed. Even if we accept the premises upon which this argument is based, Meillassoux has not established that the strong correlationist is required to assert that, necessarily, all things are possible because everything is contingent. Instead, as Giraud and Millière contend, all the strong correlationist is required to concede (to avoid the absolutisation of the correlate) is that one or more unthinkable things (i.e., that which is un-correlated with, or not “for”, us) is indeed possible. Consequently, the strong correlationist is free to hold that ‘metaphysical realism [e.g., direct realism or Meillassoux’s speculative materialism] or idealism … are equally possible’ without maintaining that ‘every unthinkable proposition is possible’. Meillassoux’s derivation of the ‘figures of factiality’ (i.e., the limits governing the otherwise lawless omnipotence of the universe – the hyper-Chaos – entailed by the necessity of everything’s contingency and the impossibility of necessity) is similarly problematic. For even if we grant that Meillassoux is right to suppose that a necessary entity is impossible, it is obvious neither that a contradictory entity would be everything that it is not, nor incapable of change. Consequently, Meillassoux’s argument does not prove the impossibility of a contradictory entity, i.e., the ‘absolute’ scope of the PNC. He also fails to prove that there must be something rather than nothing (i.e., that at least one contingent entity must exist) in order for contingency to be necessary and not itself a contingent fact. There is no reason to suppose that, in the absence of a contingent fact or contingent entity, facticity (or the necessity of contingency) would be contingent and hence less than absolute. Indeed, there is no reason to suppose that the absolute status of a logical principle (say, facticity, or the necessity of contingency, or the PNC) is dependent on the existence of any matter of fact. Consequently, the question of whether or not there could be (or could have been) nothing seems to have no

501 Ibid.
502 Ibid., 129, 123.
bearing on the necessity of everything’s contingency.\footnote{503}

In short, even if we grant the key premises upon which Meillassoux’s defence of both the ‘literal meaning of ancestral claims’ and strong correlationism are predicated (in particular, the insuperability of the correlationist circle and the weakness of Kant’s correlationism) neither his deduction of the necessity of everything’s contingency nor his derivation of the two figures of factiality succeed.

In contrast, I argue in the next chapter that, unlike Meillassoux’s deduction, Kant’s deduction is indeed ‘fit for purpose’.\footnote{504}

\footnote{503 The question of whether Meillassoux is right to characterise that which is absolute or absolutely necessary as pertaining exclusively to that which pertains to things in themselves comes to the fore in the next chapter. Drawing on Kant’s deduction and the epistemological interpretation of Kant’s idealism, I argue that Meillassoux is wrong to suppose that the absolute (or that which is absolutely necessary) is so constrained.}

\footnote{504 This phrase is from the title of Anil Gomes’ 2010 article (‘Is Kant’s Transcendental Deduction of the Categories Fit for Purpose?’) on which I draw in the next chapter.}
CHAPTER FIVE:  
KANT’S TRANSCENDENTAL DEDUCTION

Introduction

In the previous chapter, I noted an important passage in which Meillassoux claims that Hegel’s absolutisation of the correlate (and consequent dissolution of the distinction between appearances and things in themselves) is underpinned by a ‘genetic deduction’ of the ‘forms of thought’ (i.e., categories or pure concepts). Crucially, Meillassoux contrasts Hegel’s deduction of the categorial structure of being as such with Kant’s transcendental deduction of the categorial structure of appearances. Whereas Hegel’s purportedly genetic deduction of the categories enables him to demonstrate the absolute or unconditional necessity of the categories, Kant’s transcendental deduction constitutes a description of the categories, which is why, claims Meillassoux, Kant, unlike Hegel, is unable to prove the necessity or absolute status of the categories. Consequently, he contends that for Kant the categories are at best contingently necessary.

Here I defend Kant’s transcendental deduction of the categories, and develop a concise account of Hegel’s critique of Kant’s idealism. This reveals not only the serious limitations of Meillassoux’s interpretation of Kant’s approach to the deduction of the categories, but also that Hegel’s critique of Kant is predicated on the traditional metaphysical interpretation of Kant’s idealism. More specifically, I argue that Meillassoux makes four interrelated errors. First, I show that although Kant does not ‘genetically’ deduce the categories, his deduction cannot be characterised as a mere description, not least because it is predicated on, and legitimised by, the forms of judgment drawn from Kant’s conception of formal logic. Second, I argue that Kant’s categories are ‘absolutely necessary’ in the sense that they are the necessary rules of thought in relation to objects of intuition. Thus, third, I show that he is not entitled to the view that ‘absolute necessity’ pertains only to that which has ‘an absolute ontological scope’. Fourth, I argue that he is wrong to suppose that Kant denies the possibility of a ‘genetic deduction’ of the categories. The treatment of Hegel’s idealism that follows demonstrates furthermore that his principal critique of Kant’s categories is their unwarranted

505 Ibid., 38. See Chapter 4, 145.
scope restriction – which he regards as simply dogmatic – and not the method of their
deduction. Consequently, I contend that Meillassoux is wrong to suppose that it is because
Hegel ‘genetically’ deduces the categories that their scope is unrestricted. Finally, I argue that
insofar as both Meillassoux’s and Hegel’s critique of Kant’s idealism is predicated on a
metaphysical interpretation they fail to understand his central insight: that the presupposition
that we can assume the standpoint of God not only results in dogmatism but is also ultimately
incoherent.

Kant’s Transcendental Deduction

Following a brief introduction, my exegesis of Kant’s Deduction is divided into four sections:
a) The Metaphysical Deduction; b) Synthesis and the Table of Categories; c) Apperception and
the first step of the Transcendental Deduction; and d) The Second Step of the Transcendental
Deduction. Although the argument of Kant’s Transcendental Deduction is notoriously
complex, its aim is clear: to reveal the a priori contributions of the understanding to experience
and demonstrate that the concepts (i.e., the categories) that comprise that contribution apply
necessarily to empirical reality.

It should be conceded that insofar as both Kant’s Transcendental Aesthetic and his deduction
of the categories are premised on both his discursivity thesis (that human experience –
construed as ‘empirical cognition’ or ‘cognition that determines an object through perception’
– requires, and consists in the synthesis of, both concepts and sensible intuition) and his
Copernican revolution (that objects of experience conform to our cognitive and intuitive
faculties), both arguments begin from and are concerned with the character and objects of
human experience. In the Transcendental Aesthetic Kant’s demonstration that space and

506 In what follows I use the terms ‘Transcendental Deduction’ or ‘Deduction’ to refer to the actual texts of
Kant’s arguments in the Critique and ‘transcendental deduction’ or ‘deduction’ to refer to the argument itself.
507 Kant acknowledges this complexity in the Critique (A88–89/B121, 222) admitting that the argument in the
Transcendental Deduction ‘cost the most effort’ (Axvii, 103). Patricia Kitcher (1993, 61) summarises the challenge
of understanding and reconstructing Kant’s Transcendental Deduction in her remark that it ‘is widely regarded as
(1) the philosophical heart of the Critique; (2) difficult to the point of being unintelligible; and (3) utterly barren
of plausible or interesting philosophical positions or arguments’. She also notes H.J Paton’s complaint that ‘the
difficulty of following its reasoning is comparable to crossing the Great Arabian Desert by foot’.
508 CPR, B218–219, 295–296. Indeed, the central task of the Transcendental Deduction is to unite these two
distinct sources of human experience and so demonstrate that the categories necessarily govern empirical reality.
Ultimately, this is achieved by demonstrating not only that we have certain concepts a priori, but also that these
time are *a priori*, or pure forms of sensible intuition begins from the fact that objects given in sensible intuition are set in a spatiotemporal framework. However, according to Kant, the forms of space and time cannot be derived empirically. Instead, the forms of space and time are *a priori* intuitions; they are supplied by our minds and precede and ground sensible intuition and thus experience.\(^{509}\) Similarly, Kant’s Transcendental Deduction is premised on his discursivity thesis – the claim that human experience consists in the application of concepts, and hence rules, to sensory material.\(^{510}\) That is to say, Kant’s deduction is aimed at determining the *a priori* conditions of the objects of human experience and knowledge, rather than objects considered as they are in themselves, or apart from the conditions of human experience. So construed, Kant’s deduction can indeed be understood as a *description* of the nature, characteristics and sources of the intuitive and cognitive framework under which human experience and knowledge is possible and legitimised. On the other hand, Kant is clear – particularly in the case of the Transcendental Deduction – that his aim is to *deduce* the categories and demonstrate their necessity with respect to objects of experience.

Crucially, the notion of deduction with which the Transcendental Deduction is concerned is not a series of syllogisms in which premises lead to conclusions. Rather, the notion of deduction Kant deploys in the Transcendental Deduction concerns a proof of the legitimacy of the claim that the categories must apply to objects of intuition. According to Dieter Henrich, Kant modelled his deduction of the categories on a today outmoded legal technique concerned with the justification of a property or territorial claim. Thus, as Henrich explains, Kant’s deduction should be understood as a legal deduction ‘which focuses exclusively upon justifying a claim’, namely that the pure categories of the understanding correctly apply to all concepts apply universally and necessarily to the objects that can be given in our experience. Thus, the deduction is achieved only when it is shown that all objects of possible experience must themselves fall under the categories.\(^{509}\) Kant writes:

Space is not an empirical concept that has been drawn from outer experiences. For in order for certain sensations to be related to something outside me (i.e., to something in another region of space from that in which I find myself), thus in order for me to represent them as outside one another, thus not merely as different but as in different places, the representation of space must already be their ground. Thus the representation of space cannot be obtained from the relations of outer appearance through experience, but this outer experience is itself first possible only through this representation (CPR, A23/B38, 157–158).

\(^{510}\) For example, although our perception of a tree requires sensation of some object in space and time, to experience a tree, that is, to see a tree *as a tree*, we require the concept of a tree.
possible objects of experience, i.e., empirical reality.\textsuperscript{511} Henrich’s account of the notion of deduction at work in the Transcendental Deduction sheds considerable light on Kant’s enigmatic claim that ‘jurists, when they speak of entitlements and claims, distinguish in a legal matter between the questions what is lawful \textit{(quid juris)} and that which concerns the fact \textit{(quid facti)} and since they demand proof of both, they call the first, that which is to establish the entitlement or the legal claim, the \textit{deduction}.\textsuperscript{512} In what follows I set out the core features of Kant’s Transcendental Deduction. As the principle aim here is to explain the deduction, this summary is compressed and relatively brief, focusing on the key steps of the argument.

a) The Metaphysical Deduction

The first crucial step in Kant’s argument occurs prior to the Transcendental Deduction, in the section titled The Clue (or ‘guiding thread’ - \textit{Leitfaden}) to the Discovery of all Pure Concepts of the Understanding, otherwise known as the ‘Metaphysical Deduction’. Here, Kant aims to establish an exhaustive and orderly account of the ‘logical functions of thinking’.\textsuperscript{513} This is set out in the table of the ‘Logical Functions of the Understanding in Judgements’ (also known as the Table of Judgments). Before presenting the table Kant draws a distinction between general logic and transcendental logic, and provides a dense characterisation of the activity of the understanding.

He contends that, unlike general (or formal or pure) logic, which concerns ‘the absolutely necessary rules of thinking, without which no use of the understanding takes place, [irrespective of] … the difference of the objects to which it may be directed’, transcendental logic concerns the rules for thinking about objects which can be given in a sensible intuition, regardless of the forms in which that sensible intuition takes place.\textsuperscript{514} Thus, he says, general logic ‘considers only the logical form in the relation [i.e., combination, unification,

\textsuperscript{511} Dieter Henrich, ‘Kant’s Notion of a Deduction and the Methodological Background of the First Critique’, in Kant’s Transcendental Deductions: The Three Critiques and the Opus Postumum, ed. Eckart Förster (Stanford, CA: Stanford University Press, 1989). In contrast, however, Dennis Schulting has advanced the radical thesis that ‘Kant effectively derives the categories from scratch’ by which he means solely from our capacity to think (2017, 53).

\textsuperscript{512} CPR, A84/B116–117, 219–220.

\textsuperscript{513} CPR, B159, 260. Kant refers to the ‘Clue’ section as ‘the Metaphysical Deduction’ on the same page.

\textsuperscript{514} Kant characterises transcendental logic as a type of special or particular logic as it pertains to a specific domain.
subordination] of cognitions to one another, i.e., the form of thinking in general.\endnote{515} Next, Kant explains that unlike our intuitions, which are passive and ‘rest on affections’, ‘concepts rest on functions’ that the mind actively and spontaneously deploys in the production of cognition. By ‘function’ Kant means ‘the unity of the action of ordering different representations under a common one’.\footnote{CPR, A68/B93, 205.} In other words, functions are the rules through which representations – either intuitions or concepts – are combined in various ways, i.e., unified. According to Kant a unification of representations in thought is a judgment.\footnote{CPR, A55/B79, 195–196.} We can, he says, ‘trace all actions of the understanding in general back to judgments, so that the understanding in general can be represented as a faculty of judging.’\footnote{CPR, A69/B94, 205.} If judging is the activity of the understanding and judgments draw together possible cognitions, or representations, into a unity, Kant explains ‘we can find all the functions of the understanding if we can exhibit completely the functions

\begin{quote}
That from the earliest times logic has travelled this secure course can be seen from the fact since the time of Aristotle it has not had to go a single step backwards, unless we count the abolition of a few dispensable subtleties or the more distinct determination of its presentation, which improvements belong more to the elegance than to the security of that science. What is further remarkable about logic is that until now it has been unable to take a single step forward, and therefore seems to all appearance to be finished and complete (CPR, Bviii, 106).
\end{quote}

Nonetheless, Kant also complains that Aristotle’s categories lacked systematicity and that he arrived at them in an \textit{ad hoc} and haphazard manner: ‘Aristotle’s search for these fundamental concepts … had no principle, he rounded them up as he stumbled on them’ (CPR, A81/B107, 213). As Klaus Reich notes (1992, 1–2) the irony of Kant’s critique of Aristotle has not escaped the attention of critics. For Kant’s claim that his table of judgments rest on a secure foundation and articulates a complete list of the logical relations between concepts appears little more than an assertion.

Robert Hanna’s account of Kant’s logic highlights the difficulties in providing a straightforward characterisation:

\begin{quote}
Now, to be sure, Kant’s logic is very different from the logics used by logicists and neo-logicists, for his logic is significantly weaker than elementary logic. Kant’s logic includes only truth-functional logic, Aristotelian syllogistic, and a theory of (fine-grained, decomposable) monadic concepts, which is to say in more modern terms that it includes only monadic logic and a partial anticipation of higher-order intensional logic. And this may lead us to think, as Alan Hazen [1999, 92] has put it, that ‘Kant had a terrifyingly narrow-minded and mathematically trivial conception of the province of logic.’ Well, yes: Kant’s conception of the province of logic does not include polyadic predicate logic. But, on the other hand, Kant’s logic certainly captures a fundamental fragment of elementary logic (2009, 313).
\end{quote}
of unity in judgments’. The function of thought in judgment can be brought under four heads, each of which contains three moments. Accordingly, every judgment has a ‘quantity’, ‘quality’, ‘relation’ and ‘modality’.

Having determined that the activity of the understanding is to judge and that judgments unify concepts according to logical functions (underpinned by pure or formal logic whose source is the understanding itself) that can be articulated in a complete table, Kant claims to have established the ‘clue’ or ‘guiding thread’ by which to establish the pure concepts or categories of the understanding and deduce their objective validity with respect to all possible empirical objects.

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<th>Concerns how judgments interrelate within syllogisms.</th>
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519 Ibid.
520 CPR, A70/B95, 206.
521 The various general logical forms under which conceptual contents might be subsumed or otherwise combined or connected with one another in a judgment (i.e., a unified thought about some object) are neatly expressed and unpacked in the following representation of Kant’s table of judgments developed by Nicholas Joll (2013, 13).

522 For an extended account and analysis of Kant’s Table of Judgments see Reinhard Brandt (1995), Klaus Reich (1992), Wayne Waxman (2014) and Béatrice Longuenesse (2000). Although commentators have complained that Kant does little to justify the table of judgments, or that he merely cobbled it together from the resources available to him in logic text books, I think Paul Guyer (2006, 74) is right to highlight the table’s intuitive appeal.

There can be no doubt that Kant does not do much to explain the derivation of the functions of
b) Synthesis and the Table of Categories

With the table of judgments in hand, Kant introduces the notion of synthesis. This notion will take him from the form of judgments to the ‘pure concepts of the understanding or categories’. Kant characterises synthesis as ‘the action of putting different representations together and comprehending their manifoldness in one cognition’. Put simply, synthesis is the act of bringing together a manifold into a unity. Kant explains that although synthesis of intuitions is an ‘effect of the imagination’, bringing it ‘to concepts is a function that pertains to the understanding’. Unlike general logic, which brings ‘different representations under one concept analytically’ (e.g., if all As are Bs and X is an A then logic brings X under B), transcendental logic brings concepts to an a priori manifold of intuition. And it does this in a three-stage process: first, ‘a manifold of pure intuition must be given’; second, that manifold is synthesised in imagination (into a ‘pure synthesis’); and third, the concepts of the understanding unify the pure synthesis into a cognition.

Therefore it is the concepts of the understanding that finally unify the manifold and produce cognition. Kant claims that because the functions (i.e., concepts) that unify pure synthesis and the functions that unify concepts in a judgment are the same, we can generate a table of pure concepts (which Kant calls ‘categories’, following Aristotle) from the table of judgments.

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judgment, but in fact much if not all of Kant’s table follows from a few simple thoughts. If you think of judgments as making connections between some domain of objects and some domain of properties, then you will quickly see that there are in fact only a few ways the connections can be made: a particular property can be asserted of one, some, or all of the objects in the domain; or it can be denied of one, some, or all of them; if you think that all judgments are either true or false, then in any conjunction of two of them either both will be true, both false, or one true and one false; if some judgment may be false, then its negation may not be false, i.e., is necessarily true; and so on. With the possible exception of Kant’s “infinite” judgment, it looks as if the table of functions may easily be derived from the simple ideas that judgments link domains of predicates to domains of objects, and that they can only do so either truly or falsely. But what about the underlying assumptions here, for example, that predicates must always be linked to some determinate number of objects, or that any proposition must be either true or false: are they strictly speaking necessary? It is not easy to see how we would prove that they are, but neither is it easy to see how they could not be, that is, to imagine alternatives to them.

523 CPR., A76/B102, 210.
525 As we shall see in the second half of the deduction, the imagination has a central (if ambiguous) role in bridging the gulf between sensibility and the understanding. See Samantha Matherne (2026) for a concise overview of Kant’s account of imagination in his first and third critiques and Gary Banham (2014) for a comprehensive analysis of the role of imagination in Kant’s Critique.
526 CPR., A78/B104, 211.
527 CPR., A78/B104, 211.
Narrowly construed, the Metaphysical Deduction consists in the production of the table of categories from the table of judgments. Unlike the table of judgments, which concerns general logic and attends to the functions of thought when abstracted from all content, the table of categories sets out the rules for possible judgments about objects of intuition. This is why the categories are a part of transcendental logic: they are the *a priori* functions pertaining specifically to the possible judgments of objects of intuition.

Having derived an inventory of the pure concepts of the understanding, Kant claims to have established that the origin of the categories lies in the understanding ‘through their complete coincidence with the universal logical functions of thinking’. However, what Kant has yet to show is that we are entitled to claim that the categories are in fact the *a priori* and necessary rules governing ‘whatever object may come before our senses’. The business of the Transcendental Deduction, therefore, is to provide a justification for the legitimate use of the categories, i.e., one that demonstrates that they apply necessarily to objects of experience, and hence to empirical reality.

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528 Kant (A79/B104–5, 211) writes:

The same function that gives unity to the different representations in a judgment also gives unity to the mere synthesis of different representations in an intuition, which expressed generally, is called the pure concept of understanding. The same understanding, therefore, and indeed by means of the very same actions through which it brings the logical form of a judgment into concepts by means of the analytical unity, also brings a transcendental content [i.e., content produced by the synthesis involving intuition and imagination] into its representations by means of the synthetic unity of the manifold in intuition in general, on account of which they are called pure concepts of the understanding that pertain to objects *a priori*; this can never be accomplished by universal logic… In such a way there arise exactly as many pure concepts of the understanding, which apply to objects of intuition in general *a priori*, as there were for logical functions of all possible judgments in the previous table: for the understanding is completely exhausted and its capacity entirely measured by these functions. Following Aristotle we will call these concepts categories.

The Table of Categories (A80/B106, 113) is as follows:

1. Quantity: Unity, Plurality, Totality.
3. Relation: Of inheritance and Subsistence (substance and accident), Of Causality and Dependence (cause and effect), Of Community (reciprocity between agent and patient).

529 CPR, B159, 261. It is useful to contrast Kant’s claim here with Hume’s empiricist view, according to which the origins of our most basic concepts of objects lie in experience. Thus, for Hume, the category of causation has its origin in the experience of constant conjunction, which is why he claims we are not entitled to the conclusion that there is a causal law governing nature.

530 Ibid.
c) Apperception and the First Step of the Transcendental Deduction

It is today commonplace to construe Kant’s Transcendental Deduction as consisting in one proof in two steps. According to Allison, the first step demonstrates that the categories ‘serve as rules for thought of an object of sensible intuition in general’ and the second step aims ‘to establish the applicability of the categories to whatever is given under the conditions of human sensibility’.

In the first section of the Transcendental Deduction (§15) Kant argues, against empiricism, that ‘the combination (conjunctio) of a manifold in general can never come to us through the senses’ and therefore ‘whether we are conscious of it or not, whether it is a combination of the manifold of intuition or of several concepts … [combination, i.e., synthesis] is an action of the understanding’. Next, in §16, Kant formulates the principle of the transcendental unity of apperception:

The I think must be able to accompany all my representations; for otherwise something would be represented in me that could not be thought at all, which is as much as to say that the representation would either be impossible or else at least would be nothing for me. That representation that can be given prior to all thinking is called

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531 In this chapter my summary of the key components of Kant’s Transcendental Deduction of the Categories is based exclusively on the completely re-written (1787) version in the second edition of the *Critique*, (i.e., the B version). The chief virtue of the B-Deduction over the A-Deduction is that its presentation is clearer and its argument more systematic, as Kant himself states (Bxxviii – Bxlii, 121–122). In the next chapter, however, certain passages from the A-Deduction will come to the fore because it is that version upon which Meillassoux draws in his exposition and critique of Kant’s deduction.

532 The two-step thesis was established in Dieter Henrich’s seminal article ‘The Proof-Structure of Kant’s Transcendental Deduction’ (1969). Nonetheless, interpreting these steps and determining exactly how their conclusions differ, if at all, remains one of the most contentious exegetical and philosophical issues in Kant’s theoretical philosophy. Given the centrality of the Transcendental Deduction in Kant’s argument, the volume of literature on its structure and conclusions is immense and ever expanding. Focussed treatments of Kant’s Transcendental Deduction can be found in Henry Allison (2015); Karl Ameriks (1978); Manfred Baum (1979); Eckart Förster (1989); Robert Howell (2011); Dennis Schulting (2012), and Robert Stern (2006).

533 Allison, *Kant’s Transcendental Idealism*, 162. He continues: ‘In short, [the second step] attempts to link the categories (albeit indirectly) to perception rather than merely the thought of objects’. It is worth noting that Allison’s interpretation of the Transcendental Deduction is predicated on the view that the second step is a solution to a problem – left unresolved in the first step – that arises due to Kant’s ‘radical separation of sensibility and the understanding’, namely, that ‘[t]his separation leaves open the possibility that what is given in sensibility might not conform to the requirements of the understanding’ (2015, 200). To ‘exorcize … this spectre’, Allison contends that Kant must prove that there is ‘not merely a de facto conformity of the sensible with the intellectual … but a necessary one’ (2015, 200). This issue will come to the fore in the next chapter.

534 CPR., B130, 245.
intuition. Thus all manifold of intuition has a necessary relation to the I think in the same subject in which this manifold is to be encountered.\textsuperscript{535}

Kant’s point is that in order for representations to be thinkable, i.e. something ‘for me, they must be able to be accompanied by the ‘I think’. That is, it must be at least possible that I can say of a representation, a thought or experience, that “I think it”. Thus, whatever can be thought must be able to be explicitly represented as my thought, e.g., “I think it is raining” or “I know it is raining” or “I perceive it is raining.” So although there may be representations that are mine in some non-cognitive sense (e.g., unconscious representations) in order for them to be something ‘for me’ they must be possibly accompanied by the ‘I think’. Crucially, Kant holds that, properly construed, the claim that ‘the I think must be able to accompany my representations’ is a logically analytic proposition, ultimately expressing ‘the analytic unity of apperception’.\textsuperscript{536} He explains that the analytic unity of apperception ‘says nothing more than all my representations in any given intuition must stand under the condition under which alone I can ascribe them to the identical self as my representations’.\textsuperscript{537} To be in principle able to think, in relation to several representations, that “I think X, and I think Y,” logically entails that it is the same I that thinks both, i.e., the I that thinks X is the I that thinks Y. In other words, the claim that ‘the I think must be able to accompany all my representations’ is the merely analytically true claim that for each of my thoughts to be able to be mine, they must belong to a self-same I; a single thinking self. Nonetheless, Kant argues that this ‘analytic unity of apperception is only possible under the presupposition of some synthetic one’, for ‘it is only because I can combine a manifold of given representations in one consciousness that it is possible for me to represent the identity of the consciousness in these representations itself’.\textsuperscript{538} That is, in order for it to be possible that I represent various representations as mine (i.e., to say that a self-same I thinks, perceives or knows X and Y) it must be possible for me, \textit{a priori}, to unify distinct representations in a single consciousness. Thus, Kant claims that the

\textsuperscript{535} Ibid., B132, 246.
\textsuperscript{536} Ibid., B133, 247. Kant explains that, ‘this principle of the necessary unity of apperception is, to be sure, itself identical, thus an analytical proposition’ (B135, 248).
\textsuperscript{537} Ibid., B138, 249.
\textsuperscript{538} Ibid., B133–4, 247.
ability to synthesise my representations is a necessary condition for being able to be conscious of them as belonging to my unified consciousness. 

From this generic account of apperception and its conditions Kant turns to the relationship between apperception and the synthesis (i.e., unification) of the manifold of intuition. At the outset of §17 he claims that there are two conditions of the possibility of intuition. The first is that ‘all the manifold of sensibility stands under the formal conditions of space and time’, and the second – which he characterises as ‘the supreme principle of all intuition in relation to the understanding’ – is that ‘all the manifold of intuition stand under the original synthetic unity of apperception’. The manifold of intuition stands under the former insofar as space and time are given in intuition, and under the latter ‘insofar as [the manifold of intuition] must be capable of being combined in one consciousness’. Next, after characterising the understanding as ‘the faculty of cognitions’ and stipulating that cognitions ‘consist in the determinate relation of given representations to an object’, Kant makes the following crucial claim:

An object . . . is that in the concept of which the manifold of a given intuition is united. Now, however, all unification of representations requires unity of consciousness in the synthesis of them. Consequently the unity of consciousness is that which alone constitutes the relation of representations to an object, thus their objective validity, and consequently is that which makes them into cognitions.

Here, Kant first defines an object as that manifold of a given intuition that is united in thought by means of a concept. Next he argues that all unification of representations (and thus what is given in a manifold) entails consciousness of unity, and unity of consciousness. He concludes that it is the unity of consciousness that confers objective validity on representations. That is to say, the act of bringing representations to self-consciousness (to the ‘I think’) is a necessary condition for generating rule-governed representations of an object. In other words, when we unify a manifold by means of a concept we bring it to, or under, self-consciousness and

539 Allison (2004, 342) usefully clarifies the distinction between analytic and synthetic unity by noting that Kant understands the former as ‘a one contained in a many’ and the latter as a ‘many contained in a one’. In other words, analytic unity of the manifold refers to the unity of the manifold with respect to the I think (‘a one contained in a many’) and the synthetic unity of the manifold refers to the unity of the manifold of representations (‘a many contained in a one’).

540 CPR, B136, 248.

541 Ibid.

542 Ibid., B137, 249.
thereby make that manifold thinkable as an object. And it is for this reason, he says, that the ‘principle of the original [or pure] synthetic unity of apperception’ is the ‘first pure cognition of the understanding … on which the whole rest of its use is grounded’. Kant concludes that

> The synthetic unity of consciousness is therefore an objective condition of all cognition, not merely something I myself need in order to cognize an object but rather something under which every intuition must stand **in order to become an object for me**, since in any other way, and without this synthesis, the manifold would not be united in one consciousness.

In §19 Kant draws together his account of the objective unity of consciousness (i.e., ‘that unity through which … the manifold of the given in an intuition is united in a concept of an object’) with a characterisation of the nature of judgment. In so doing he prepares the way to connect apperception and the categories. Here, Kant explains that in a judgment cognitions are related to one another, and that this relation is a combination or synthesis in one consciousness. So, a judgment is defined as ‘nothing other than the way to bring given cognitions to the **objective** unity of apperception’.

§20 constitutes the final step and conclusion of the first step of the Transcendental Deduction. Here, Kant draws together the threads of his analysis in both the Metaphysical Deduction and Transcendental Deduction so far to demonstrate that ‘all sensible intuitions stand under the categories, as conditions under which alone their manifold can come together in one consciousness’.

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543 Kant provides the following example: in order to cognise a line in space (which is ‘not yet a cognition at all’) it must be drawn. In so doing I ‘synthetically bring about a determinate combination of the given manifold, so that the unity of this action is at the same time the unity of consciousness (in the concept of a line), and thereby is an object (a determinate space) first cognized’ (B137, 249).

544 Ibid.

545 Ibid., B141, 251. Kant distinguishes between judgments possessing objective validity and those which are merely subjectively valid by noting the difference between the judgments that ‘bodies are heavy’ and ‘if I carry a body, I feel a pressure of weight’ (B142, 252). He claims that in the former case, unlike in the latter, we ‘would be able to say that these two representations are combined in the object, i.e., regardless of any difference in the condition of the subject, and are not merely found in perceptions (however often as that might be repeated)’ (B142, 252). Despite the limitations of Kant’s example (as Allison (2015, 368) and Jill Vance-Buroker (2011, 125) point out, a judgment of association still entails the unification of representations under the objective unity of apperception) this distinction is supposed to highlight that objective judgments involve the relation between concepts (e.g., the predication of a property to an object) whereas subjective judgments consist in a relation between intuitions or sensations (i.e., a mere association of representations or constant conjunction). More importantly, however, Kant’s point is that objectively valid judgments, in which representations ‘are combined in the object, i.e., combined independently of what the subject’s state is’ are subject to principles which are derived from the principle of the necessary unity of apperception (B142, 252).
consciousness'. Otherwise put: we must unify the manifold of intuition in accordance with the categories.

In summary, Kant’s claim is that if we are to cognise an intuition as a unity by an act of judgment (hence through the understanding) we must bring it under a single consciousness (i.e., be able to attach “I think” to an object of intuition) then we must do so by bringing the manifold of intuition under the categories.

d) The Second Step of the Transcendental Deduction.

So far, then, Kant claims to have established that ‘a manifold that is contained in an intuition that I call mine is represented as belonging to the necessary unity of self-consciousness through the synthesis of the understanding, and this takes place by means of the category’. Kant notes that in ‘the beginning of [the] deduction of the pure concepts of the understanding’ he had to ‘abstract from the way in which the manifold for an empirical intuition is given, in order to attend only to the unity that is added to the intuition through the understanding by means of the category’. In contrast, in the second step of the deduction, Kant’s aim is to show ‘from the way in which empirical intuition is given in sensibility that its unity can be none other than the one the categories prescribes to the manifold of a given intuition’. And in so doing, he says, he will be able to explain the ‘a priori validity [of the

547 Ibid., B143, 252.
548 Kant’s argument in the first part of the deduction can be reconstructed as follows:

- The unity of the manifold given in sensible intuition is subject necessarily to the original synthetic unity of apperception.
- The understanding unifies the manifold of given representations through judgments. Indeed, the understanding is a ‘faculty for judging’.
- From these two premises it follows that, insofar as a manifold is given in one unified intuition, the manifold must be determined by, or with regard to, the logical functions of judgments, for these are the forms of unification through which the manifold is combined and brought to the unity of consciousness. Here, Kant is claiming that it is by being determined with regard to the logical functions that the representation of the manifold of a sensible intuition attains objective validity.
- If a manifold of sensible intuition is capable of being brought to the synthetic unity of consciousness, and if (following the Metaphysical Deduction) the categories are the specific forms of judgment for bringing the manifold of sensible, or empirical, intuition to the synthetic unity of consciousness in a cognition, then it follows that the categories are the rules by which the manifold of intuition is unified.

549 CPR, B144, 253.
550 Ibid.
categories] in regard to all objects of our senses.\textsuperscript{551} In other words, whereas the first part of the deduction established that any discursive intelligence, regardless of its particular form/s of sensible intuition must employ the categories in judgment to unify (i.e., \textit{think}) objects of sensible intuition, the second part is specifically concerned with demonstrating that the categories apply necessarily to objects given in \textit{our} spatiotemporal form of intuition. Thus, as put concisely by Anil Gomes, in the second step ‘Kant moves from the claim that we [as discursive intellects] must apply the categories to the claim that the categories must apply.’\textsuperscript{552}

In order to do this – and thereby complete the deduction by demonstrating that the categories apply necessarily to all sensible intuition and, therefore, to all objects in empirical reality – Kant shifts his attention from the understanding to the forms of our intuition, i.e., space and time. More specifically, in the second step of the deduction Kant moves from the consideration of the rules, i.e., categories, germane to the thought of objects of intuition as such – regardless of the forms in which they appear – to the way in which determinate objects of intuition are given in human sensible intuition.\textsuperscript{553} He explains the difference between the first and second steps in §21 as follows:

[S]ince the categories arise \textbf{independently from sensibility} merely in the understanding, I must abstract from the way in which the manifold for an empirical intuition is given, in order to attend only to the unity that is added to the intuition through the understanding. In the sequel [i.e., the second step] it will be shown from the way in which the empirical is given in sensibility that its unity can be none other than the one the category prescribes to the manifold of a given intuition in general … thus by the explanation of its \textit{a priori} validity in regards to all objects of our sense the aim of the deduction will first be fully attained.\textsuperscript{554}

\textsuperscript{551} Ibid.
\textsuperscript{552} Anil Gomes, ‘Is Kant’s Transcendental Deduction of the Categories Fit for Purpose?’ \textit{Kantian Review} 15, no. 02 (2010), 129. Gomes’ answer to the question in his article’s title is ‘yes’. Against James Van Cleve’s conclusion (2003, 89) that there is a structural deficiency in Kant’s deduction because, at best, it can establish only that ‘all my representations are connected in judgments that use [the] categories’, Gomes argues that the second step of the deduction is designed to demonstrate that categories do (and must) in fact apply to phenomena.
\textsuperscript{553} Kant explains that the categories, being merely formal, ‘extend to objects of intuition in general, whether [they] be similar to our own or not, as long as it [i.e., the form of intuition] is sensible and not intellectual’ (B148, 255).
\textsuperscript{554} CPR., B144, 253. Allison explains that although ‘both parts of the Deduction are concerned with the relation between the categories and objects of possible experience … the first part considers such objects merely from the side of the understanding, and therefore qua correlates of the synthetic unity of apperception, … [while] the second part is concerned with them qua objects of possible experience, and therefore as they appear clothed in their spatial and/or temporal forms’ (2015, 383).
How does Kant show ‘from the way in which the empirical is given in sensibility that its unity can be none other than the one the category prescribes’? In short, his approach is to demonstrate that insofar as empirical objects are given in space and time they must be unified in accordance with the categories. To do this, Kant returns to the forms of intuition, space and time. He argues that insofar as sensible intuition of objects in discrete moments of time and in discrete parts of space is possible, these objects are represented as parts of a whole, a unity. As Allison puts it, although ‘[t]ime is, as it were, given only one moment at a time … in order to represent a determinate time we must be able to represent past and future that are not “present” and ultimately the single time of which they are parts’.555 Thus, according to Kant, the very awareness of objects in space and time, as being extended and as existing over a duration is the result of a prior synthesis of both space and time, and that ‘space and time are represented a priori not merely as forms of sensible intuition, but also as intuitions themselves (which contain a manifold) and thus with the determination of the unity of manifold in them’.556

According to Kant, the prior synthesis of space and time required for our representations of objects at a determinate time, or over a determinate duration, and as extended in space in a unified manifold, is the work of the imagination, which he describes as ‘the faculty for representing an object even without its presence in intuition’.557 In effect, this original ‘transcendental synthesis of the imagination’ combines the understanding, as the faculty of unification, with sensation to produce the representation of the unity of space and time. Otherwise put, the unity of space and time required for our representation of objects in a unified manifold is a product of ‘an effect of the understanding on sensibility’, and the imagination is the site of this production.558 Accordingly, Kant claims that the representation of space and time as unities ‘has its seat in the understanding’.559 If Kant is right that sensible intuition presupposes this original transcendental synthesis of the imagination, in which the understanding affects sensibility to produce our representations of space and time (as a unified

555 Allison, Kant’s Transcendental Idealism, 190. The same is true of space. In order to represent a part of space we must be able to represent it as part of a whole.
556 CPR, B160, 261.
557 Ibid., B151, 256.
558 Kant characterises ‘the transcendental synthesis of the imagination’ as ‘an effect of the understanding on sensibility and its first application (and at the same time the grounds of all others) to objects of the intuition that is possible for us’ (B151, 256).
559 Ibid., B162, 262.
manifold), then it follows that whatever is given in space and time is governed by the categories. Nonetheless, Kant is clear that the original transcendental synthesis of the imagination ‘precedes all concepts’.  

So although our representation of space and time is generated by an effect of the understanding upon sensibility, this is not an effect of concepts upon sensation. If, as we have seen, the understanding is the faculty of judgments through concepts, but transcendental synthesis of the imagination precedes all concepts, then how does the understanding affect sensibility to generate the unity of time and space? This is a highly controversial and complex issue because its resolution concerns the fundamental question of how, if at all, the understanding relates to the forms of intuition, and, therefore, how concepts (in the form of the categories) apply to the spatiotemporal manifold of intuition to produce experience and make possible knowledge of empirical reality.

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560 Ibid., B161n, 261.

561 The crucial link between the categories and both the forms of intuition and the matter of sensibility is established at section §26 and its notoriously obscure footnote (B160–161n, 261):

Space, represented as object (which is really required in geometry), contains more than the mere form of intuition, namely the comprehension of the manifold given in accordance with the form of sensibility in an intuitive representation, so that the form of intuition merely gives the manifold, but the formal intuition gives unity of the representation. In the Aesthetic I ascribed this unity merely to sensibility, only in order to note that it precedes all concepts, though to be sure it presupposes a synthesis, which does not belong to the sense but through which all concepts of space and time first become possible. For since through it (as understanding determines the 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.

Following Allison, I take ‘form of intuition’ to be the ‘manner in which the elements of the pure manifold of outer sense are “given”, i.e., passively received by a cognizing subject, in contrast to formal intuition, [which is] the same manifold qua conceptually determined, and thereby, “represented as object”, as occurs, for example, in geometrical cognition’ (2015, 409). Crucially, whereas the unity of time and space construed as form of intuition is simply a brute given, the unity of space and time construed as formal intuition is ‘a product of a transcendental synthesis … a synthetic unity and, as such, grounded in the unity of apperception’ (2015, 413). As we have seen, this synthesis, wherein space and time are represented as unities, is an effect of the understanding on sensibility through the faculty of imagination.

The central difficulty here, however, is that in the second sentence Kant states that ‘this unity precedes all concepts … [but] presupposes a synthesis’. The question is how can a synthetic unity (that is the product of the understanding on sensation through imagination) precede all concepts, if, as Kant maintains, combination or unification is an intellectual activity through concepts. Indeed, as Lorne Falkenstein (1995, 91) complains, the footnote is so obscure that it can be made to serve the needs of any interpretation whatsoever. From a contradiction, anything follows, and any text that contains two assertions like (a) ‘this unity [of space and time]… presupposes a synthesis… through which all concepts of space and time are first made possible,’ and (b) ‘the unity of this intuition [of space and time] belongs a priori to space and time and not to the intellectual concept’ is close enough to be exhibiting a contradiction that it makes it possible to get virtually any conclusion one pleases out of this passage.
Gomes’ succinct approach to this issue falls under what Onaf and Schulting term a ‘broadly conceptualist’ view, according to which the unity of space and time precedes any application of the categories but is nonetheless broadly conceptual insofar as that unity can be traced directly to the unity of apperception.\textsuperscript{562} His interpretation and argument returns us to ‘the original synthetic unity of apperception’ as set out at the beginning of the Deduction. At §20 Kant claims that the ‘analytic unity of apperception is only possible under the presupposition of some synthetic one’\textsuperscript{563} What this means is that the unity of the I with respect to its representations (analytic unity) is predicated on the unity of the I’s representations (synthetic unity). In other words, ‘it is only because I can combine a manifold of given representations in one consciousness that it is possible for me to represent the identity of the consciousness in these representations itself’.\textsuperscript{564} Accordingly, it is only insofar as the I unifies its representations that consciousness of its own identity is possible. This is why ‘[s]ynthetic unity of the manifold of intuitions, as produced \textit{a priori} is … the ground of the identity of apperception itself, which precedes \textit{a priori} all my determinate thinking.’\textsuperscript{565} Indeed, because this synthetic unity of the manifold of intuitions precedes – and is presupposed by – the analytic unity of apperception, Kant concludes that the synthetic unity of apperception is ‘the highest point to which one must affix all use of the understanding … indeed this faculty is the understanding itself.’\textsuperscript{566}

If the ‘highest point [of the use] of the understanding’ is synthetic unity of apperception and synthetic unity of apperception precedes analytic unity of apperception, then synthetic unity of apperception is necessary for the application of concepts. This helps us make sense of Kant’s

\textsuperscript{562} Christian Onof and Dennis Schulting, ‘Space as Form of Intuition and as Formal Intuition: On the Note to B160 in Kant’s Critique of Pure Reason’, \textit{Philosophical Review} 124, no. 1 (2015), 10. The broad conceptualist view contrasts with the ‘standard conceptualist’ approach (2015, 9) according to which Kant holds that the understanding is responsible for generating the unity of space and time through acts of synthesis governed by the categories. As we have seen, the problem with the standard conceptualist interpretation is that Kant explicitly \textit{presupposes} synthesis which is one in which ‘the understanding determines sensibility’.

\textsuperscript{563} CPR, B133, 247.

\textsuperscript{564} Ibid. It is important to highlight Kant’s claim that synthesis (i.e., unification or combination) ‘is an operation of the understanding … [and does not] lie in the objects … and cannot be borrowed from them through perception’ (B135, 248).

\textsuperscript{565} Ibid., B134, 248.

\textsuperscript{566} Ibid., B134n, 247.
claims that the unification of space and time are a pre-conceptual (i.e., pre-categorial) effect of the understanding on sensation and that the categories apply necessarily to the manifold of spatiotemporal intuition. According to Gomes, Kant’s argument is that both the a priori synthesis of space and time (which does not involve the categories) and the categorial synthesis of the manifold of spatiotemporal intuition (i.e., of that which is in space and time) have their origin in the synthetic unity of apperception.

Thus, the same understanding is at work in both the a priori synthesis necessary for the representation of time and space as unities, and the synthesis of the manifold of spatiotemporal intuition according to the categories. The upshot, as Gomes puts it, is that ‘anything given in space and time, in virtue of standing under the synthetic unity of apperception, must be unified in accordance with the rules by which the understanding generates a unity … the categories’.\(^\text{567}\) That is to say, the application of concepts is necessary for the perception of empirical objects in intuition. In short, then, the second step of the deduction demonstrates that because the representation of space and time as unities are the effect of the understanding on sensibility, that which is in space and time must be unified according to the categories. Accordingly, whereas the first step of the deduction demonstrates that we must apply the categories to all sensible intuition, the second step establishes the objective validity of the categories by demonstrating that a spatiotemporal manifold is such that the categories must apply. Thus, the second step completes the deduction by taking Kant from the claim that ‘we must apply the categories to the claim that categories must apply’.\(^\text{568}\) In so doing Kant establishes the bridge between concepts and intuition required for a priori knowledge of empirical reality.\(^\text{569}\)

\(^{567}\) Gomes, ‘Is Kant's Transcendental Deduction of the Categories Fit for Purpose?’, 132.

\(^{568}\) For critical commentary on Gomes’ interpretation see Schulting (2017, 158–162).

\(^{569}\) It is worth highlighting here that, at the end of the deduction (B165, 264) Kant notes that although ‘all appearances of nature … stand under the categories … [as laws] of appearances in space and time … particular laws … cannot be completely derived from the categories, although they all stand under them. Experience must be added in order to come to know particular laws at all’. It is also worth noting that although Kant begins the process of demonstrating how the categories are applied or instantiated in spatiotemporal intuition towards the end of the Deduction (at B162 – 163) he completes this process in the two subsequent chapters (the Schematism and the Analytic of Principles).
Meillassoux’s Characterisation of Kant’s Deduction of the Categories

Although I cannot here evaluate the overall coherence of Kant’s deduction, or assess the range of interpretations to which it has been subject, I am now in a better position to assess Meillassoux’s contentions that: 1) Kant describes (and does not deduce) the ‘forms of thought’; 2) Kant’s categories are not endowed with ‘absolute necessity’; and 3) if the were ‘genetically’ deducible (from an absolutely necessary first principle) Kant would be forced to conclude that things in themselves could not be different to appearances.

The first of these claims is plausible, if ambiguous. It is certainly the case that Kant’s deduction is aimed at revealing the categories; those pure concepts of transcendental logic that serve as the rules according to which apperceiving rational beings with discursive, as opposed to purely intuitive, intellects can experience and come to know an empirical reality, e.g., a spatiotemporal world. Insofar as Kant sets out the categories and identifies their grounds, he does indeed describe them. But insofar as Kant aims to legitimise the categories by establishing their origin and demonstrating the necessity of their application to, or instantiation in, empirical reality, he does far more than simply set them out. It is worth highlighting that although the categories are the particular or ‘special’ rules of transcendental logic (i.e., those rules for thinking about objects which can be given in sensible intuition, regardless of the form(s) in which that sensible intuition takes place) they are based on the table of judgments. Again, the table of judgments sets out a putatively complete list of the ‘logical functions of thinking’ or ‘functions of unity’ by which thoughts can be combined in a judgment. In other words, the table of judgments systematically represents the rules governing possible subject-predicate relations in propositions. Furthermore, while Kant does not develop this table, and hence the table of categories, from a single necessary principle, it is important to note that, whatever its limitations, the table of judgments is predicated on Kant’s account of general logic; ‘the supreme principle’ of which is the PNC.\footnote{CPR, B189/A150, 279. As the ‘supreme principle of all analytic judgments’ Kant characterises the PNC as follows:}

\[\begin{align*}
\text{Whatever the content of our cognition may be, and however it may be related to the object, the general though to be sure only negative condition of all of our judgments whatsoever is that they do not contradict themselves; otherwise these judgments in themselves (even without regard to the object) are nothing … [T]he principle of contradiction … is a general though merely negative criterion of all truth.}
\end{align*}\]
judgments from the PNC alone, but it is to say that both the table of judgments and the categories are underpinned and legitimised by logical laws, however inadequate that underpinning and legitimisation might be. It is also important to stress that the deduction of the categories is completed by demonstrating that they must be instantiated in empirical reality because both the categories and the forms of intuition have their condition of possibility in the original synthetic unity of apperception, which is ‘the highest point to which one must affix all use of the understanding, even the whole of logic … indeed this faculty is the understanding itself’.571

From the above, we can concede that although Kant does not ‘genetically’ deduce the ‘forms of thought’ it is not obvious that they are merely descriptions, for their deduction is predicated on formal logic and the proof of the necessity of their instantiation. This takes us to the second of Meillassoux’s claims: that Kant’s categories are not endowed with ‘absolute necessity’.

Now, it is certainly true that insofar as they pertain exclusively to discursive, rational, apperceiving beings, the application of the categories is limited to a sensible manifold and the form(s) of intuition in which that manifold appears. Insofar as their scope is limited with respect to a priori knowledge and empirical knowledge we can concede that the categories are not absolute, in the sense that they can provide no knowledge of things as they are in themselves, i.e., as they might be for a purely intuitive intellect. Nonetheless, it is not obvious

Robert Hanna (2017) usefully situates the table of judgments in the context of Kant’s account of general (or pure) logic:

The table of judgments … captures a fundamental part of the science of pure general logic: pure, because it is a priori, necessary, hence strictly universally true, and also without any associated sensory content; general, because it is strictly underdetermined by all objectively valid representational contents and also abstracts away from all specific or particular differences between represented objects, and thereby “has to do with nothing but the mere form of thinking” (A54/B78); and logic because, in addition to the table of judgments, it also systematically provides categorically normative conditio sine qua non rules for the truth of judgments (i.e., the law of non-contradiction or logical consistency) and for valid inference (i.e., the law of logical consequence) (A52–55/B76–79).

571 CPR, B134n, 247. That is, both formal logic (at the heart of the functions set out in the table of judgments and hence the categories) and the forms of intuition (the unity required to perceive determinate parts of space and moments in time) are grounded in an original synthetic unity of apperception, i.e., that which makes ‘the concept of combination possible’ in the first place, and, according to Kant, in the absence of which there would be no unities: neither intuitions (containing sensible manifolds) nor judgments (containing intellectual manifolds) (B131, 246).
that either the categories or the table of judgments on which they are based are themselves contingently necessary, even if their scope or application (with respect to knowledge of the world) is limited. Whatever the limitations of his derivation of the table of judgments, and his claim to its completeness, Kant’s contention is that it sets out an exhaustive list of the logical rules by which thoughts can be unified in a judgment or proposition. The table of judgments is an expression of general logic, abstracted from all content, and thus pertains to the rules of the unification of thoughts as such, i.e., irrespective of the object to which these thoughts pertain. Crucially, Kant’s discursivity thesis entails that thought alone is blind. In the absence of sensible intuition, and a form in which that sensible intuition is framed, i.e., something for these thoughts to be about, we can neither experience nor gain knowledge of the world. Thus the table of judgments may set out an exhaustive account of the rules for possible thought – and, therefore, for possible knowledge – but it does not exhaust what can or does exist. In this sense, Meillassoux is right to claim that Kant’s distinction between appearances and things in themselves means that things in themselves may be other than how things appear, but he is wrong to suppose that this conclusion is a consequence of the contingency of the rules of judgment: the table of judgments sets out the ‘absolutely necessary’ rules of thought and the categories set out the ‘absolutely necessary’ rules of thought in relation to objects of intuition.

This takes us to Meillassoux’s third claim; that if the ‘forms of thought’ were genetically deducible from an absolutely necessary first principle then Kant would be forced to conclude that things in themselves could not be different from appearances. But this claim is ambiguous, for even if we concede that a deduction of the ‘forms of thought’ that begins from a principle with an ‘absolute ontological scope’ may indeed result in ‘an absolutisation of the correlate’ (by demonstrating that the ‘forms of thought’ have an ‘absolute ontological scope’) it is not obvious that Kant eschews a genetic deduction in order to avoid this conclusion. Again, the ambiguity in Meillassoux’s claim rests on the sense he attributes to the notion of absolute necessity. It seems there is no prima facie warrant for construing the notion of absolute necessity solely as that which has ‘an absolute ontological scope’. For example, despite the fact that Kant limits the PNC to actual and possible thought (see Chapter 2) this does not warrant the

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572 And even then a second deductive step is required to demonstrate that the categories are instantiated in some empirical reality by showing that the manifold of intuition is subject to apperception.
conclusion that the PNC is anything less than absolutely necessary. That is, even if we concede that things in themselves could be contradictory, we remain entitled to the view (false though it may be) that thought as such is governed necessarily by the PNC, which is to say that all possible thought requires and must adhere to the PNC, and that all attempts to refute this claim would be contradictory. Now, Meillassoux may be dissatisfied with any scope restriction of the absolute but it is not clear that he is entitled to the view that absolute necessity pertains exclusively to ontological claims about what must exist (i.e., that which has an absolute ontological scope). This in turn raises a question about a ‘genetic deduction’. If this is a deduction from an absolutely necessary first principle, and if I am right that such a first principle need not entail an absolute ontological scope (in the sense that it must exist in or govern everything that could or does exist) then it is not obvious that Kant could not have deduced the categories ‘genetically’ from the PNC. That is, if Kant had directly, or ‘genetically’, deduced the table of judgments from the PNC, this would not entail that either the table of judgments or the categories have an absolute ontological scope (in the specific sense that they would govern necessarily all actual or possible reality). It is important here to emphasise that Kant’s claim that our knowledge is restricted to appearances is established in his discursivity thesis (i.e., the position that human knowledge of the universe – and that of discursive, rational, apperceiving beings in general – requires sensible intuition) and that that thesis has its roots in his critique of rationalist dogmatism and his reply to empiricist scepticism. In other words, the method by which Kant develops and demonstrates the legitimacy of the table of judgments and the table of categories seems to have no bearing on the discursivity thesis, even if the discursivity thesis entails the scope restriction of both.

Let me now turn to Meillassoux’s contention that it is because Hegel deduces the forms of thought in a ‘genetic sense’ that he is able to determine their ‘unconditional necessity… abolishing the possibility of there being an in-itself that could differ from them’. The first

573 It is likely that Meillassoux’s claim that Kant could not deduce the categories from an ‘absolutely necessary’ first principle is predicated on his mistaken view that Kant held that the PNC has ‘an absolute ontological scope’. Meillassoux’s argument seems to be that Kant has to avoid a ‘genetic deduction’ of the categories from the PNC in order to avoid ‘absolutising’ the categories because that would undermine the distinction between appearances and things in themselves. As we have seen, there are two obvious problems with this argument. The first is that there is no evidence whatsoever that Kant thinks that the PNC governs the universe as it is in itself. And the second is that even if Kant did think this, it is not at all obvious that such a so-called genetic deduction of the categories from the PNC would necessarily entail their ‘absolute scope’.

574 AF, 38.
thing to note is that although Hegel agrees with Kant that the source of the categories lies in thought he objects not only to the way in which Kant’s table of judgments (and hence the categories) is cobbled together from the resources available to him, but also to the fact that the categories are not derived from the activity of thought alone. Thus, Hegel complains that ‘Kant’s philosophy took the easy way in its finding of the categories.’ In contrast, for Hegel a thoroughgoing deduction of the categories will begin with nothing more than thought and consist in the ‘the exposition of the transition of that simple unity of self-consciousness into these determinations and distinctions [i.e., logical categories].’ Now, although it is true that Hegel attempts to derive the categories from this presuppositionless beginning, it is not at all clear, as Meillassoux suggests, that it is in virtue of this starting point that Hegel is able to demonstrate their ‘unconditional necessity’. Rather than focussing on the contentious issue of whether Hegel’s putatively presuppositionless beginning and complete derivation of the categories constitutes an argument for, or from, absolute idealism (i.e., the absolute necessity of the categories) I turn here to Hegel’s critique of Kant’s idealism. For what that critique demonstrates is that Hegel is concerned far more with the unwarranted restriction of the categories than with the nature of their derivation. Indeed, as we shall see, Hegel’s critique of Kant is predicated on the view that his restriction of the categories to appearances is simply dogmatic. In the brief assessment of Hegel’s critique of Kant’s idealism that follows, I demonstrate that while Hegel agrees with Kant that cognition is grounded in the categories, his critique of Kant’s restriction of the scope of the categories is both premised on his absolute idealism and a metaphysical interpretation of Kant’s idealism.

Hegel’s Critique of Kant’s Idealism

In The Encyclopaedia Logic Hegel complains that, ‘although the categories pertain to thinking as

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575 G. W. Hegel, The Encyclopaedia Logic and Züsten, trans. T. F. Geraets, W. A. Suchting, and H. S. Harris (Indianapolis: Hackett, 1991), §42, 84. He continues: for Kant the “I,” the unity of self-consciousness, is totally abstract and completely undetermined. So how are we to arrive at the determinations of the I, or at the categories? Fortunately [according to Kant], we can find the various kinds of judgment already specified empirically in the traditional logic. To judge, however, is to think a determinate object. So, the various modes of judgment that have already been enumerated give us the various determinations of thinking.’


577 Stephen Houlgate (2005, 44–45; 2006, Ch.1) contends that Hegel’s deduction of the categories is indeed an argument for absolute idealism and the necessity of the categories with respect to being as such. In contrast, Robert Stern (2009, 221–222, n33) argues not only that this is not Hegel’s strategy, but also that the most a presuppositionless beginning could achieve is the suspension of judgment with respect to the identity of thought and being.
such, it does not at all follow from this that they must therefore be merely something of ours, and not also determinations of objects themselves’. He continues; ‘[b]ut, according to Kant’s view, this is what is supposed to be the case, and his philosophy is subjective idealism …’

Here, Hegel’s challenge is not directed at Kant’s claim that the categories derive from, or have their origin in, the understanding, or at the view that experience requires the application of concepts to intuition. Rather, Hegel objects to the restriction of categories to appearances and the view that the categories are merely formal. Accordingly, for Hegel, even if Kant is right that the categories ‘are universal and necessary determinations’, insofar as they ‘are still only our thoughts [they] are cut off from what the thing is in itself by an impassable gulf’. Similarly, on the side of intuition, Hegel rejects Kant’s view that space and time are merely our forms of intuition, i.e., that they are ‘nothing other than merely the form of all appearances … the subjective condition of sensibility, under which alone … intuition is possible’. Instead, for Hegel, ‘things are in truth themselves spatial and temporal’.

So, according to Hegel, neither categories nor forms of intuition require the subjectivist restriction he finds in Kant’s philosophy. For Hegel, Kant’s formal idealism entails that the knowledge we have of reality is, in fact, a kind of self knowledge, according to which ‘we can cognize of things a priori only what we ourselves put into them’, as Kant himself contends in the introduction to the Critique. The upshot for Hegel is that Kant’s philosophy is an anti-philosophy, precisely because it entails a catastrophic loss of the Great Outdoors, i.e., the ‘Absolute’. Hegel characterises Kant’s account of cognition and experience in the following terms:

[The word] ‘I’ … is the abstract self-relation, and what is posited in this unity is infected by it, and transformed into it. Thus the Ego is, so to speak, the crucible and the fire through which the indifferent multiplicity is consumed and reduced to unity … To this end the reality of the world must be crushed as it were; i.e., it must be made ideal.

578 Hegel, The Encyclopaedia Logic, §42, 85.
579 Hegel writes: ‘this bonding of the categories with the stuff of perception is what Kant understands by “experience”. And that is quite correct.’ (2009, 227).
580 Hegel, The Encyclopaedia Logic, §41, 83.
581 CPR, A26/B42, 159.
583 CPR, Bxviii, 111.
584 Hegel, The Encyclopaedia Logic, §42, 84–85.
Although Hegel acknowledges that Kant’s account of the activity of consciousness ‘expresses correctly the nature of all consciousness’ (for ‘human beings’, he says, ‘strive … to appropriate [the world] and conquer it’) he complains that it is not the ‘subjective activity of self-consciousness that introduces absolute unity into the manifold’. Rather, ‘this identity [i.e., unity of self-consciousness and unity of the manifold] is the Absolute … that lets singular (beings) enjoy their own selves, and it is just this that drives them back into unity’. Against what he takes to be Kant’s view that unity is given to objects by the activity of the understanding and apperception on a manifold of intuition, Hegel claims that the manifold is itself comprised of unities and that we misunderstand our cognitive activity when we attribute that unity to us, i.e., to consciousness. Instead, for him, categorical cognition uncovers unity: it does not produce it. Accordingly, Hegel complains that Kant’s transcendental deduction establishes neither the objective validity of the categories, nor the objective reality of empirical objects. In other words, as Schulting puts it, for Hegel,

the Kantian thesis about the objectivity of objects, the main claim of (the transcendental deduction) does not establish the truth about the very things that exist in the world (as things in themselves) but is merely about the way in which we, as cognising subjects, take objects to be, how they appear to us as finite human beings, not how things are essentially.\textsuperscript{586}

For Hegel, Kant’s error lay in his adherence to a strict separation between that which is “for us”, i.e., that which appears according to the forms of intuition and categories, and that which is not “for us”, i.e., in-itself. This opposition between what is subjective and objective, in Hegel’s terminology, is an assumption. Indeed, for Hegel, insofar as it is predicated on the radical separation of concepts and intuitions, Kant’s formal idealism is not only uncritical, but also runs against the spirit of true philosophy. Ultimately, for Hegel, Kant’s assumption that legitimate knowledge of the universe requires sensibility is dogmatically wedded to empiricism. In this way, Kant’s formal idealism and the limits it places on reason, fundamentally undermines the true aim of philosophy, which, as Schulting explains, is for Hegel the attainment of knowledge of ‘the Absolute, infinite, the truly real … what is beyond mere belief

\textsuperscript{585} Ibid., §42, 85.
\textsuperscript{586} Dennis Schulting, 
\textit{Kant’s Radical Subjectivism: Perspectives on the Transcendental Deduction} (Cham: Palgrave Macmillan, 2017), 349 (in Ch.8, ‘On Hegel’s Critique of Kant’s Subjectivism in the Transcendental Deduction’).
and finite cognition and what is truly, unconditionally, the case in reality.\textsuperscript{587} For Hegel, a truly reflective and critical philosophy would reflect on the very oppositions it takes for granted. Thus, Kant’s error was a lack of critical reflection: ‘precisely by taking the reflective starting point absolutely, as an unproblematic assumption [Kant retained] a pervasive dualist outlook and the relativism or scepticism that this results in’.\textsuperscript{588} Consequently, Kant’s formal idealism is incomplete. For, \textit{pace} Kant, ‘[p]hilosophy is idealism because it does not acknowledge either one of the opposites [i.e., thought and world, subject and object, form and matter] as existing for itself in its abstraction from the other.’ So, although ‘Kantian philosophy has the merit of being idealism because it does show that neither the concept in isolation nor intuition in isolation is anything at all; that intuition by itself is blind and the concept by itself is empty’, it ‘declares finite cognition to be all that is possible’ and turns this ‘negative idealistic side into that which is in itself, into the positive’.\textsuperscript{589} In this way, according to Hegel, Kant’s idealism ‘falls back into absolute finitude and subjectivity’.\textsuperscript{590} In other words, Kant’s limitation of reason renders the categories subjective, incapable of providing true knowledge of things as they are in themselves. For Hegel, what Kant should have seen was that categorial cognition enables us to grasp things as they are in themselves as opposed to how they merely appear in intuition.\textsuperscript{591} Thus, Hegel’s view is that Kant’s restriction thesis, i.e., the claim that the categories can inform us only of the \textit{a priori} conditions of appearances, must be rejected. Indeed, according to Hegel, Kant’s restriction thesis, and the concomitant view that we can have no determinate knowledge of things as they are in themselves, is contradictory: for insofar as both claims are true, and truth (for Hegel) is absolute, then Kant is \textit{de facto} claiming absolute knowledge or knowledge of the absolute. Indeed, for Hegel, even the assertion that we can know only appearances conflicts with the restriction thesis, because that claim concerns what is absolutely true, rather than what is merely apparent. Hegel develops this line of criticism, underpinned by

\textsuperscript{587} Schulting, \textit{Kant’s Radical Subjectivism}, 346. According to Hegel, ‘The fundamental principle common to the philosophies of Kant … and Fichte is … the absoluteness of finitude and, resulting from it, the absolute antithesis of finitude and infinity, reality and ideality, the sensuous and the supersensuous, and the beyondness of what is truly real and absolute’ (1977, 62).

\textsuperscript{588} Schulting, \textit{Kant’s Radical Subjectivism}, 347.


\textsuperscript{590} Ibid.

\textsuperscript{591} See Hegel’s \textit{Science of Logic}, 12.17–19, 514–516. Karl Ameriks (2000, 294) notes that Hegel’s absolute idealism is ‘remarkably like a highly confident realism, a belief in the in-principle transparency of all reality to our rational faculty’. Ameriks compares this to ‘what Michael Dummett calls Frege’s objectivism’ and quotes Dummett on Frege: ‘In saying that what is objective is not independent of reason, Frege does not mean that its existence depends on our thinking … He means that it cannot be apprehended save by, or by reference to, rational thought’ (2000, n294).
a broadside against the claim that knowledge of things as they appear counts as truth, in the introduction to the *The Phenomenology of Spirit*:

[Kantian critical philosophy] presupposes that the absolute stands on one side and that cognition stands on the other for itself, and separated from the absolute, though cognition is nevertheless something real; that is, it presupposes that cognition, which, by being outside of the absolute, is indeed also outside of the truth, is nevertheless truthful: an assumption through which that which calls itself the fear of error gives itself away to be known rather as the fear of truth. This conclusion arises from the following: that the absolute alone is true, or the true alone is absolute. It is possible to reject this conclusion [as Kant’s critical philosophy does] by making the following distinction: that a cognition which indeed does not cognize the absolute, as science wants, may nevertheless also be true; and that cognition in general, if indeed it is incapable of grasping the absolute, may nevertheless be capable of grasping other truth. But we shall eventually see that this sort of talking back and forth amounts to a murky difference between an absolute truth and some other kind of truth.  

The objection here is that by claiming that cognition is separated from ‘the absolute’ Kant’s critical idealism argues that cognition is both ‘outside of the truth’ and ‘nevertheless truthful’. Hegel’s charge is that although the Kantian might respond that there is a distinction between empirical truths (‘a cognition which indeed does not cognize the absolute … [but which] may nevertheless be true’) and ‘other truths’ (those that could be obtained if cognition was capable of grasping the absolute) this involves an untenable notion of truth, according to which there is some truth other than absolute truth.

While this brief account of Hegel’s critique of Kant’s idealism is of course limited we can, nonetheless, highlight some straightforward problems.  

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593 There is a vast secondary literature on Hegel’s critique of Kant’s theoretical philosophy that I cannot engage with here. Notable examples include: Brady Bowman (2013); William Bristow (2012); Paul Guyer (2008); Robert Hanna (2013); Béatrice Longuenesse (2010); John McDowell (2013); Robert Pippin (1989); Stephen Priest (1992); Robert Stern (2014); Sally Sedgwick (2014), and Kenneth Westphal (2015).
does not entail that super-sensible reality (whatever that is) is in fact not spatiotemporal. I take it that Kant does not, indeed cannot, rule this out. As we have seen, Kant’s claim is only that, insofar as we can consider things in themselves they should be considered as non-spatiotemporal. This claim neither rules out, nor rules in, anything about a super-sensible reality. Relatedly, it is not obvious that Kant’s distinction between concepts and intuitions as the two indispensable sources of our knowledge of the world entails that there is an absolute metaphysical separation between mind and world. Kant neither denies nor affirms a metaphysical separation of this sort. Again, such knowledge about the ultimate metaphysical nature of the relationship between mind and world is beyond our possible cognition. On his account, whatever relationship there is between mind and world construed as things in themselves is unknown and unknowable.

The epistemological reading of Kant’s idealism also suggests a reply to Hegel’s complaint that Kant’s separation between, say, empirical or logical truths, and truths about things in themselves (i.e., the absolute) rests on an incoherent, because relativistic, notion of truth. In Chapter 3 I discussed Allison’s reply to the claim that things in themselves have ontological priority over appearances. Although that discussion was framed through the question of the compatibility of the claims that we are free and determined, Allison’s general point was that knowledge claims are indeed relative. This is not to say that truths are of different kinds, but it is to say that truths are relative to different procedures and frameworks, which is why from one perspective we have a warrant for denying our freedom and from another we have a warrant for affirming it. On Allison’s view, there is no need to insist that there is an ultimate fact of the matter, an “absolute” truth. Instead, the warrant for knowledge claims depends on the framework from within which the object in question is assessed. In Kant’s theoretical philosophy this means that genuine knowledge about the universe is restricted to empirical reality, for although the categories are the transcendental rules for thinking about objects of intuition as such, without a restriction of their scope (to some form of intuition) and in the absence of a sensory manifold, reason drives the understanding into dogmatism. We can, I think, generalise Allison’s point to claim that all knowledge claims are dependent on a ‘set of norms on the basis of which assertions are justified and each involves considering its object in
a certain manner … there is no context independent fact of the matter.\textsuperscript{594} Indeed, Hegel’s contention that Kant’s idealism ‘presupposes that cognition, which, by being outside of the absolute, is indeed also outside of the truth’ is a strong indication that he takes Kant to be committed to the view that things in themselves are what is ultimately real, which is to say that he has a metaphysical interpretation of Kant’s idealism.\textsuperscript{595} Finally, Ameriks’ reply to Hegel’s charge that Kant cannot hold both the restriction thesis and the view that all that can be known is how things appear (rather than what is absolutely the case) is that Kant ‘never claimed that there is nothing we can know that is absolutely true’. He continues, ‘the … assertion that “our sensible qualities must have such and such principles and cannot characterize things in themselves” [does not] conflict with the restriction thesis [because it does not give] determinate knowledge of things in themselves … for although it gives a kind of absolute knowledge, this is quite negative and indeterminate and not inconsistent with any thesis Kant wants to hold’.\textsuperscript{596}

Conclusion

Meillassoux’s critique of Kant’s deduction of the categories is premised on the unfounded claim that the manner of Kant’s derivation of the categories renders them at best contingently necessary, which is to say, necessary only “for us” and hence restricted to appearances. In contrast, he says, Hegel’s genetic deduction of the categories entails their absolute or unrestricted scope, by which Meillassoux means that they pertain to all actual and possible reality (whether appearances or things in themselves). I have argued that Meillassoux’s characterisations of Kant’s arguments are mistaken. Although interpreting Kant’s deduction of the categories is far from straightforward (not least because of the considerable difficulties he encounters in his efforts to prove that the categories necessarily apply to, or are instantiated in,

\textsuperscript{594} Allison, \textit{Kant’s Transcendental Idealism}, 48. Despite the fact that Allison’s critique of the claim that things in themselves have ontological priority is developed in reply to Ameriks, Ameriks himself develops a largely similar reply to Hegel’s critique of Kant’s idealism. Ameriks (2000, 293) writes that he sees ‘no problem here as long as Kant gives, as he surely does, some indication about how these [different] truths are to be distinguished, such as by different procedures of verification (respectively: transcendental arguments, formal logic, science, intellectual intuition)’.

\textsuperscript{595} This point has been conceded by Stephen Houlgate who explains that ‘there is reason to think that … Hegel misunderstands Kant’s concept of the thing in itself’ because ‘Hegel takes [Kant’s] concept of the thing in itself to refer … to what things are objectively, to what they \textit{really are} in themselves, that is, he conflates the thing in itself with \textit{being}’ (2015, 31).

empirical reality) he is clear that his aim in the first part of the Deduction is to establish the necessary rules for thought about objects of intuition. The manner in which he derives the table of judgments and consequently the table of categories may be problematic, but there is no evidence to suggest that his particular assumptions about the rules of logic or the rules of thought have any bearing on the scope restriction of the categories. Consequently there is no evidence to suggest that a so-called genetic deduction of the categories would be unrestricted (or ‘absolute’ as Meillassoux would put it). As I have shown, the scope restriction of the categories to objects of intuition emerges from Kant’s discursivity thesis: it has nothing to do with the manner of the deduction. Similarly, his restriction of the table of judgments to the rules of thought has no bearing on either appearances or on things in themselves. The table of judgments sets out the rules of thought as such. The fact that these are not the rules of ‘being as such’ is entirely unrelated to the method by which these rules are derived, however problematic that method might be. Furthermore, it is not clear that Meillassoux is entitled to the view that a scope restriction of rules (to either thought as such or to thought pertaining to objects of intuition) entails that these rules are less than absolute. The mere fact that rules pertain to particular spheres (e.g., the sphere of thought as such, the sphere of thought about objects of intuition, or even the sphere concerning impossible objects) does not at all license the conclusion that these rules are contingently necessary. Kant’s claim is not “if thought exists then X, Y and Z are its necessary rules”; rather, his claim is simply that “X, Y and Z are the necessary rules of thought”. Kant may be wrong about these rules, but Meillassoux provides no reason to suppose that that which is absolute pertains exclusively to claims about what does or could exist in-itself.

In my brief assessment of Hegel’s complaints that Kant’s idealism is subjective and dogmatic (because Kant simply assumes that categorial cognition is restricted to experience) and contradictory (because Kant holds that it is absolutely true that we cannot know absolute truth, i.e., truth of things ‘as they really are’) I have argued that these criticisms are predicated on the metaphysical interpretation of Kant’s distinction between things in themselves and appearances, and the concomitant assumption that only knowledge of things ‘as they really are’ (as opposed to how they appear) counts as truth. In reply to Hegel’s complaint that Kant dogmatically restricts space and time to appearances, I emphasised both that Kant’s contention that things in themselves should be considered (in transcendental reflection) as non-
spatiotemporal follows from his restriction thesis, and that the warrant for knowledge claims is
relative to the epistemological framework from within which the object in question is assessed.
In other words, pace Meillassoux – and Hegel – Kant’s epistemological approach demonstrates
that we are not entitled to assume that only that which is true of things as they are in
themselves constitutes ‘real’ (or even ‘absolute’) truth. Indeed, I think Allison is right that, in
the final analysis, there is ‘no context-independent fact of the matter’.

Consequently, what it means for something to be ‘absolutely true’ means for it to be true according to some
framework, some ‘set of norms on the basis of which assertions are justified’ in relation to the
consideration of an object ‘in a certain manner’, as Allison puts it.

If, alternatively, absolute truth is construed as that which is independent of a particular set of norms or epistemological
framework, then, following Kant (and again pace Meillassoux and Hegel) it is not clear what
could be meant by such truth or knowledge. It seems that both Meillassoux and Hegel have
failed to grasp the import of Kant’s scope restriction of the categories. That limitation is
neither a result of the correlationist circle or two-step argument nor a dogmatic assertion.

Rather, it expresses the far deeper contention that our knowledge of the world, and that of
apperceiving rational beings in general, requires an epistemological framework comprised of
both categorial rules and intuited content, the latter of which restricts the legitimate application
of the former. Kant’s Deduction aims to bridge the gulf between the categories and intuition
by proving that, insofar as experience is possible, these categories are necessarily instantiated
in, and govern, empirical reality. Crucially, however, although we can (indeed we must) consider
things as they are in themselves in accordance with the categories, in the absence of intuition
the categories cannot yield genuine knowledge of things as they are in themselves, which is to
say, as they would be for a purely intuitive intellect. Insofar as that conception of knowing
indexes knowing things construed as unrestricted by a form of intuition, its epistemic model is
the God’s-eye perspective. However, because that epistemic model concerns the concept of an
object as cognised by a purely intellectual intuition, or a pure understanding, it is all but
inconceivable as a form of knowledge, since there would be no separation between knower

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597 Allison, *Kant's Transcendental Idealism*, 48
598 Ibid.
599 Although I cannot pursue the matter here, it strikes me that insofar as his objection is principally aimed at what
he sees as Kant’s unwarranted scope restriction of the categories, as well as the problem of the neglected
alternative, Hegel’s critique is redolent of the critique of the Gem. Indeed, Guyer’s complaint that ‘Transcendental
idealism . . . is a harshly dogmatic insistence that we can be quite sure that things as they are in themselves cannot be
as we represent them to be’ (1987, 333) is, I think, a fair summary of the thrust of Hegel’s critique.
and known. It seems that both Meillassoux and Hegel misconstrue Kant’s argument for the scope restriction of the categories, largely because they adopt a transcendentally realist interpretation of Kant’s conception of the thing in itself – as the ‘genuine ultimate’ nature of things, the real ‘truth or fact of the matter’. If I am right about that, then it seems that both Meillassoux and Hegel fail to grasp the three central insights of Kant’s idealism. First, that in the absence of the scope restriction of the categories, the understanding is driven to dogmatism, which is the problem Kant’s revolution is supposed to address in the first place. Second, that there is no framework-independent knowing and hence, third, that there is no framework-independent fact of the matter. And that remains so even if, in transcendental reflection, we must consider objects construed as they are in themselves – as they might be for a pure understanding – as the ground of appearances.

The full extent and import of Meillassoux’s misunderstanding of Kant’s deduction will become clear in the next chapter, which concerns his efforts to shore up the thesis of the necessity of everything’s contingency by tackling what he sees as the remaining sceptical and correlationist rejoinders that might stand in its way. Here, Meillassoux contends that he must demonstrate that the fact of the evident stability of nature and the uniformity (and eternality) of its laws cannot prove the necessity of causal law, and consequently that it does not conflict with the thesis of the necessity of everything’s contingency. And to do this, he claims he must refute Kant’s transcendental deduction, which he characterises this way: 1) a necessary condition for the possibility of consciousness is that empirical reality is organised in accordance with the categories (and in particular causal necessity); 2) consciousness exists; therefore, 3) empirical reality is governed by causal necessity. Although this is an intuitively plausible interpretation of Kant’s deduction, it is simply mistaken, principally because such an argument could not establish the objective validity or necessity of the categories with respect to appearances – which is the central aim of the second step of the deduction. Unfortunately, Meillassoux’s misunderstanding of Kant’s idealism in general, and his deduction in particular, feature prominently in the closing stages of his argument. Consequently, assessing these misunderstandings is a key component of the analysis developed in the next chapter.

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601 Again, according to Allison, the notion of things in themselves indexes ‘another kind of concept of a thing (one qua cognized by a “pure understanding”) … which ex hypothesi cannot yield cognition of objects’ (2007, 35 – 36).
CHAPTER SIX:
THE ILLUSION OF CAUSAL NECESSITY? HUME’S PROBLEM AND
MEILASSOUX’S SOLUTION

[W]e must transform our perspective on unreason, stop construing it as the form of
our deficient grasp of the world and turn it into the veridical content of the world as
such … Chaos underlies the apparent continuity of phenomena.\(^{602}\)

Introduction

Meillassoux acknowledges that the contention that all things are necessarily contingent is
bound to meet with considerable resistance, not only from the correlationist insistence on our
finitude, but also on the basis of the obvious fact that the world is stable. For if everything that
does or could exist is necessarily contingent ‘we would have to admit that [physical] laws could
actually change at any moment for no reason whatsoever'\(^{603}\). Indeed, it would seem that

short of a stupefying coincidence, a world without physical necessity would be riven at
each instant and in each of its points by an immense multiplicity of disconnected
possibilities, on account of which it would implode into a radical disorder infusing
even its tiniest material particles.\(^{604}\)

Meillassoux’s approach to this challenge is framed through a reformulation of Hume’s
problem of induction; specifically, the question of how it is that nature and its laws are
apparently stable, uniform and – so far as we know – eternal, if these laws are in fact
contingent. His goal is to demonstrate that that stability, uniformity and eternality does not
constitute a barrier to accepting the necessity of everything’s contingency, and therefore to
accepting the ontological reality of hyper-Chaos. To this end, Meillassoux first tackles what he
takes to be Hume’s and Kant’s respective attitudes to Hume’s thesis that there is no means to
prove causal law. According to Meillassoux, whereas Hume simply accepts the existence of
causal law, Kant’s transcendental deduction is an attempt to prove the necessity of causal law
with respect to empirical reality on the basis of the fact that consciousness is possible and
would not be possible in the absence of causal law. He contends that both Hume and Kant

\(^{602}\) AF, 82–83
\(^{603}\) Ibid., 83.
\(^{604}\) Ibid., 84.
tacitly rely on an inference from the evident stability and uniformity of nature to the necessity of nature’s uniformity according to causal law, which is itself predicated on a refutation of the thesis that physical laws are contingent. Indeed, according to Meillassoux, that refutation implicitly relies on probabilistic reasoning founded on the assumption that there is a totality of possible physical laws. Against this, Meillassoux deploys an interpretation of Georg Cantor’s theory of infinities to argue that when the universe is construed as a non-totalisable or unbounded infinity, probabilistic reasoning cannot establish that one event (or set of laws) is more or less likely than any other. When the universe is construed as an unbounded infinity, Meillassoux contends, all eventualities are equally likely. It is in this way that Meillassoux aims to convince us that all barriers to accepting the view that the logic of possibility alone governs the universe are based on fallacious or otherwise assumptive reasoning. Finally, Meillassoux contends that this mathematical picture of the hyper-chaotic universe as an unbounded infinity governed only by the logic of possibility provides the grounds upon which to absolutise mathematical discourse and so to finally vindicate the thesis that mathematisable properties of objects are the primary qualities of these objects as they are in themselves.

I maintain that Meillassoux’s argument is not only predicated on a question that does not stand in need of answer, but also on a tendentious interpretation of Hume’s scepticism and naturalism, and a fundamental misunderstanding of Kant’s transcendental deduction grounded on a transcendentally realist interpretation and critique of his idealism.

**Hume’s Problem**

Meillassoux’s treatment of Hume’s problem takes its cue from the following questions:

…we might ask how we are to explain the manifest stability of physical laws given that we take these to be contingent…if laws are contingent, and not necessary, then how is it that their contingency does not manifest itself in sudden and continual transformations? How could laws for which there is no permanent foundation give rise to a stable world?²⁶⁰⁵

Although his strategy to address these questions is familiar, since it builds on Hume’s

²⁶⁰⁵ Ibid., 92
epistemology and critique of causal necessity and induction, Meillassoux’s analysis is aimed at overcoming Hume’s epistemological scepticism without endorsing either his naturalism or Kant’s transcendental philosophy. I shall begin with a brief account of Hume’s problem as it emerges from his critique of metaphysics.

The peroration at the end of Hume’s *Enquiry Concerning Human Understanding* culminates with the famous clarion call to end the pretensions and veiled superstitions of traditional metaphysics:

If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No. Commit it then to the flames: For it can contain nothing but sophistry and illusion.\(^{606}\)

This conclusion emerges as the implication of his analysis of the nature and possibility of metaphysics. In order to establish whether knowledge of metaphysical entities or of the ultimate nature of the universe is feasible, Hume’s strategy is first to determine the nature and limits of reason; how reason works, what can be known for sure, if at all, and what merely believed. We must, he says, ‘enquire seriously into the human understanding, and show, from an exact analysis of its powers and capacity, that it is by no means fitted for such remote and abstruse subjects…[W]e must cultivate true metaphysics with some care, to destroy the false and adulterate.’\(^{607}\) Although Hume claims to avoid an extreme Pyrrhonian scepticism, his answer to the question of the limits of reason not only puts paid to metaphysics as a discipline but also (and in so doing) consigns certainty about the workings and nature of the material world beyond the reach of empirical science. Indeed, it was to be these sceptical arguments that famously awoke Kant from his ‘dogmatic slumbers’.\(^{608}\)

In order to determine the limits of knowledge, Hume separates reasoning into two possible kinds,

to wit, relations of ideas and matters of fact. Of the first kind are the sciences of

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\(^{606}\) David Hume, *An Enquiry Concerning Human Understanding and Other Writings*, ed. Stephen Buckle (Cambridge: Cambridge University Press, 2007), 12.34, 144. References to Hume’s *Enquiry* indicate first the chapter number (e.g., 12), followed by a full stop, and then the paragraph number in the chapter (e.g., 34), followed finally by a page number from Buckle’s edition.

\(^{607}\) Ibid., 1.9, 12.

\(^{608}\) Kant, *Prolegomena to Any Future Metaphysics*, 4:260,10.
geometry, algebra, and arithmetic … discoverable by the mere operation of thought … Matters of fact … are not ascertained in the same manner; nor is our evidence of their truth, however great, of a like nature with the foregoing. The contrary of every matter of fact is still possible; because it can never imply a contradiction … That the sun will not rise tomorrow is no less intelligible a proposition, and implies no more contradiction than the affirmation, that it will rise. We should in vain, therefore, attempt to demonstrate its falsehood. Were it demonstratively false, it would imply a contradiction. 609

This is ‘Hume’s fork’. 610 Knowledge is either derived from experience (matters of fact) or gained by logically unpacking concepts (relations of ideas); and it is only in the latter case that absolute (i.e., logical) certainty is possible. The reason for this is that, unlike necessary propositions generated by logical deduction or the unpacking of concepts, propositions generated by empirical observation and inference can be only contingently true. At the heart of the distinction between relations of ideas and matters of fact is the PNC: whereas denying that a triangle has three sides is a contradiction in terms, ‘the contrary of every matter of fact is still possible because it can never imply a contradiction’. 611 In other words, for Hume the existence or occurrence of anything in the empirical world cannot be demonstrated as being necessary because its contrary or its non-existence is not a logical contradiction. Thus, the truth or falsity of any empirical fact cannot be determined analytically, i.e., by the analysis of the meanings of the terms in question. Instead, according to Hume, verification of any given matter of fact requires experience, observation and experiment. Thus, because the ideas of God and the soul do not correspond to any simple or direct impressions or perceptions that might form the basis of an empirical justification for our beliefs in them, Hume argues that the existence of such metaphysical entities is at best unknowable. 612

Hume’s commitment to empiricism leads to the sceptical conclusions for which he is well known. He argues that when we reflect on our most basic assumptions and beliefs about the world and ourselves we find that, just like the metaphysical entities above, the simple impression or perception that would serve as the empirical foundation for these assumptions

609 Ibid., 5.1–2, 28–29.
611 Hume, Enquiry, 4.2, 28.
612 According to Hume, ‘[w]hen we entertain, therefore, any suspicion that a philosophical term is employed without any meaning or idea (as is but too frequent), we need but inquire from what impression is that supposed idea derived? And if it be impossible to assign any, this will confirm our suspicion’ (2007, 2.9, 18). He characterises impressions as ‘all our more lively perceptions, when we hear, or see, or feel, or love, or hate, or desire, or will’ (2007, 2.3, 15).
and beliefs is lacking. In both the *Treatise* and the *Enquiry*, Hume discusses the problems with the taken-for-granted existence of space, time, the self (personal identity), the external world and causation, subjecting each to the same tests. In each case he concludes that justification of such beliefs cannot be established either *a priori* or by recourse to an impression or group of impressions.\(^{613}\)

In the course of his reflections on the genesis of and justifications of our beliefs in things of which we have no sensory impressions, Hume develops his account and critique of the notions of causation and induction. Crucially, he argues that causation – which he says is at the heart of all our reasoning about matters of fact – is something about which we can have no more than belief. It was this that directly inspired Kant’s transcendental revolution.

Hume’s sceptical conclusions regarding causation emerge from his reflections on how we come to believe in the existence of that which is not directly experienced or not immediately present to consciousness. ‘What’, he asks, ‘is the nature of that evidence which assures us of any real existence and matter of fact beyond the present testimony of our senses or the records of our memory?’\(^{614}\) His answer is that ‘[a]ll reasoning concerning matter of fact seems to be founded on the relation of *cause* and *effect*. By means of that relation alone we can go beyond the evidence of our memory and senses.’\(^{615}\) Hume’s argument is that reasoning about matters

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\(^{613}\) The tactic Hume employs to demonstrate this typically follows the form of the following argument in the *Treatise*.

If any impression gives rise to the idea of self, that impression must continue invariably the same through the whole course of our lives, since self is supposed to exist after that manner. But there is no impression constant and invariable. Pain and pleasure, grief and joy, passions and sensations succeed each other and never all exist at the same time. It cannot, therefore, be from any of these impressions or from any other that the idea of self is derived, and, consequently, there is no such idea. (1965, 251–252).


\(^{615}\) Ibid., 4.4, 29. By way of explanation Hume (4.4, 29) offers the following examples:

If you were to ask a man, why he believes any matter of fact, which is absent; for instance, that his friend is in the country, or in France, he would give you a reason, and this reason would be some other fact, as a letter received from him, or the knowledge of his former resolutions and promises. A man finding a watch or any other machine in a desert island, would conclude that there had once been men on that island. All our reasonings concerning fact are of the same nature. And here it is constantly supposed that there is a connection between the present fact and that which is inferred from it. Were there nothing to bind them together, the inference would be entirely precarious. The hearing of an articulate voice and rational discourse in the dark assures us of the presence of some person. Why? Because these are the effects of the human make and fabric, and closely connected with it. If we anatomise all the other reasonings of this nature, we shall find that they are founded on the relation of cause and effect.
of fact – whether in careful scientific experiment and analysis or in our most basic everyday activities and beliefs – fundamentally depends on causal inference; or more precisely, on the supposition of a causal relationship that conforms to past experience.

Having concluded that reasoning about matters of fact, about material existence, is founded on ‘the relation of cause and effect’, Hume wants to determine the foundations of ‘all our reasonings and conclusions concerning that relation’.\(^{616}\) He argues that despite the sensory evidence of the constant conjunction of events and of the temporal priority of one event before another, neither reason nor experience can justify either our belief in a relationship between, what we take to be, cause and effect or serve as an ultimate grounds upon which such a relationship might stand. Hume contends that it is only after repeated experience of one object or event following another that we can begin to infer the occurrence of the second event or object from the first. To demonstrate the point, he asks us to imagine a freshly minted Adam, who, despite being endowed with perfect rational and sensory faculties, ‘could not have inferred from the fluidity and transparency of water that it would suffocate him, or from the light and warmth of fire that it would consume him’.\(^{617}\) So, according to Hume, on the basis of initial sensory impressions alone, i.e., without the requisite experience, we could never infer or predict that fire burns or water drowns. Without experience – which is to say, \textit{a priori} – we could have no way of knowing what will follow from what. Indeed, he says, ‘if we reason \textit{a priori,} anything may appear able to produce anything’.\(^{618}\) Famously Hume writes:

> When I see, for instance, a billiard-ball moving in a straight line towards another; even suppose motion in the second ball should by accident be suggested to me, as the result of their contact or impulse; may I not conceive, that a hundred different events might as well follow from that cause? May not both these balls remain at absolute rest? May not the first ball return in a straight line, or leap off from the second in any line or direction? All these suppositions are consistent and conceivable. Why then should we give the preference to one, which is no more consistent or conceivable than the rest? All our reasonings \textit{a priori} will never be able to show us any foundation for this preference.\(^{619}\)

It is worth stressing that in addition to demonstrating the all but limitless range of logical

\(^{616}\) Ibid., 4.14, 34.
\(^{617}\) Ibid., 4.6, 30.
\(^{618}\) Ibid., 12.29, 143.
\(^{619}\) Ibid., 4.29, 32.
possibilities that might follow an object or event, Hume is arguing that rationally justifying the selection of one or other consequence or event as being more or less likely or probable on the basis of a priori reason alone is impossible. This means that any selection or ‘preference’ on the basis of reason alone is arbitrary. Hume illustrates the logic of possibility with two striking examples. Using a priori reasoning alone, Hume writes, ‘[t]he falling of a pebble may, for aught we know, extinguish the sun; or the wish of a man control the planets in their orbits’.\(^{620}\) To restate the point: however peculiar or unlikely we take these events to be, insofar as they are logically coherent they are for Hume at least in principle as possible as any other event.

As we have seen, because causal connections are neither immediately obvious from the mere sight of this or that object, nor demonstrable on the basis of a priori reasoning, Hume argues that experience is a necessary condition for causal inference. This conclusion does not, however, justify belief in the existence of causal necessity. Experience has only demonstrated that, so far as we know, B has always followed A: it has not demonstrated that B must or will inexorably follow A. Hume finds that at the heart of our everyday belief in causation and, therefore, he says, reasoning from experience, there is a ‘supposition that the course of nature will continue uniformly the same’.\(^{621}\) Hume’s efforts to determine both the foundations and possible justifications for this supposition have come to be known as the problem of induction, or ‘Hume’s Problem’.

In the abstract to the Treatise Hume, provides a concise demonstration of his argument.

It is evident that Adam, with all his science, would never have been able to demonstrate that the course of nature must continue uniformly the same, and that the future must be conformable to the past. What is possible can never be demonstrated to be false; and it is possible the course of nature may change, since we can conceive such a change. Nay, I will go farther, and assert that he could not so much as prove by any probable arguments that the future must be conformable to the past. All probable arguments are built on the supposition that there is this conformity betwixt the future and the past, and therefore can never prove it. This conformity is a matter of fact, and, if it must be proved, will admit of no proof but from experience. But our experience in the past can be a proof of nothing for the future, but upon a supposition that there is a resemblance betwixt them. This, therefore, is a point which can admit of no proof at

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\(^{620}\) Ibid., 12.29, 143.

all, and which we take for granted without any proof.\textsuperscript{622}

Put simply, Hume’s argument is that any attempt to justify causal inference or induction on the basis of causal inference or induction begs the question; it presupposes what it needs to demonstrate. The reason for this is that the principle that nature is uniform (the supposition underpinning the belief that the future will necessarily resemble the past) can be justified only by appeal to experience – that so far as we know, the future has resembled the past. But, as we have seen, in order to make this argument effective, we must presuppose the uniformity of nature, which is a circular argument. There can thus be no \textit{a priori} rational proof of the supposition of the uniformity of nature and, therefore, no \textit{a priori} rational grounds upon which to justify induction, causation or factual inference. The upshot, according to Hume, is that our everyday beliefs about how the world works and virtually all of our scientific reasoning are without any secure rational foundation.

**Meillassoux’s Critique and Solution**

Meillassoux thinks that Hume’s view of induction is essentially correct, but contends that the ‘three types of responses [that] have been envisaged’ to this problem are all mistaken because they are all predicated on the view that ‘physical processes are indeed possessed of ultimate necessity’.\textsuperscript{623} According to him, these responses ‘have been: a \textit{metaphysical} response, a \textit{sceptical} response (the one espoused by Hume himself), and … Kant’s \textit{transcendental} response’.\textsuperscript{624}

Meillassoux gives short shrift to the first of these responses. The metaphysical or dogmatic response, he says, follows a procedure of identifying a necessary first principle from which the necessity of the world and its laws are derived. He identifies this logic in Leibniz, for whom, according to Meillassoux, ‘the eternity of our world, or at least the principles that govern it, would be guaranteed by the eternity of divine perfection itself’.\textsuperscript{625}

The next response is Hume’s own. Hume argues that, despite being unable to ground our

\textsuperscript{622} Ibid.
\textsuperscript{623} AF, 87.
\textsuperscript{624} Ibid.
\textsuperscript{625} Ibid. As we saw in Chapter 2, this is an idiosyncratic interpretation of Leibniz’s argument.
belief in the necessity of causation and the uniformity of nature in either *a priori* reasoning or in experience, we nonetheless believe in causation and natural laws and act in accordance with these beliefs. Consequently, Hume shifts his focus to the origins of these beliefs. Thus, as Meillassoux notes, for Hume the question is no longer ‘why the laws are necessary, but why we are convinced that they are’, or why we believe in causal law and the uniformity of nature. \(626\) Hume’s answer is straightforward: ‘all inferences from experience … are effects of custom, not of reasoning’. \(627\) In other words, we are compelled spontaneously by an innate predisposition to form expectations on the basis of past experience. Repeated and regular occurrence of X followed by Y leads to the expectation that these will occur in the future. Thus it is this habit of expecting things to recur that, says Hume, constitutes the psychological and instinctual basis of our belief in causation and the uniformity of nature and its laws. Indeed, for Hume, just as causal inference is at the heart of our everyday experience, it is, as Meillassoux puts it, our ‘propensity to believe that what has already recurred will invariably recur in the same way in the future that governs our entire relation to nature’. \(628\)

Despite his critique of induction and probabilistic reasoning, Hume nonetheless commends the reasonableness of both experimental reasoning and drawing inferences on the basis of past experience. For instance, in the *Treatise* he writes that ‘[o]ne who concludes somebody to be near him, when he hears an articulate voice in the dark, reasons justly and naturally; tho’ that conclusion be deriv’d from nothing but custom’; and in the *Enquiry* that ‘[o]ne, who in our climate, should expect better weather in any week of June than in one of December, would reason justly, and conformably to experience … A wise man … proportions his belief to the evidence.’ \(629\) Unsurprisingly, efforts to reconcile these *prima facie* conflicting claims have given rise to a variety of interpretive approaches. I cannot assess the range of approaches here, but it is important to emphasise that, for Hume, there is nothing *per se* unreasonable about inductive reasoning, even if it cannot be *deductively* justified (because the principle of the uniformity of nature cannot be demonstrated *a priori*). \(630\) Indeed, as Peter Millican notes, ‘Hume …
consistently preach[ed] the virtues of inductive science, repeatedly emphasising its superiority over non-empirical “divinity and school Metaphysics” and even advocating explicit inductive criteria of rationality. On Millican’s interpretation ‘there is a sense in which Hume is genuinely sceptical about induction, and another sense in which he is not’. He is genuinely sceptical about induction because, as we have seen, he denies our ability to prove induction through either empirical evidence or a priori reasoning. However, having swept those options aside, we are nonetheless left with the instinctive and ‘irresistible assumption of uniformity’ which underpins both our everyday experience and our capacity for rational scientific enquiry into the workings of the natural world. The upshot of this is that although we must give up the ‘pretence [of] ultimate rational insight’ into the nature of the physical world (its ‘ultimate springs and principles’) we have no choice but to rely on inductive reason in our investigations into physical reality. Thus, ‘we may esteem ourselves sufficiently happy’, writes Hume, ‘if, by accurate enquiry and reasoning, we can trace up the particular phenomena to, or near to … general principles’ such as ‘[e]lasticity, gravity, cohesion of parts, communication of motion by impulse’ which, he says, ‘are probably the ultimate causes and principles which we shall ever discover in nature’. In short, despite the fact that the grounds for our belief in induction is instinct and custom, Hume maintains both that we have a rational warrant for inductive reasoning and that, nonetheless, we cannot prove that laws are necessary or that nature is necessarily uniform. So, when Hume insists that it is rational to apportion our belief to the

this camp include: Henry Allison (2010, Ch.5), Tom Beauchamp and Alexander Rosenberg (1991), Janet Broughton (1983), Don Garrett (2015, Ch.6), Peter Millican (2002, Ch.4), Harold Noonan (1999, Ch.3) and David Owen (2004, Ch.6). For a concise survey of approaches see Leah Henderson (2018, §5.1).

632 Ibid., 168.
633 Ibid.

Hume’s Reason is inductive Reason, not because we have any rational ground for expecting induction to be reliable, but simply because its irresistibility makes it the best we have left once the bogus ideal of perceptual insight has been swept away. And so paradoxically, in an age of continuing rationalistic ambition amongst ‘our modern metaphysicians’ [Enquiry, 12.34, 144] … induction’s greatest sceptic becomes also its foremost champion.
evidence, this in no way undermines his claim that we have no means of demonstrating the necessity of laws.  

The third response, says Meillassoux, is Kant’s ‘objective deduction of the categories as elaborated in the Critique of Pure Reason’s “Analytic of Concepts”’. Before developing a summary account of Kant’s Deduction, Meillassoux rightly notes that despite conceding that Hume ‘indisputably proved that it is wholly impossible for reason to think such a [necessary] connection [between cause and effect] a priori and from concepts’, Kant rejects his view that we infer or derive causal relation from our experience of temporal succession and constant conjunction. Instead, Meillassoux contends that Kant ‘produces an indirect proof of causal necessity … [which he claims] proceeds as follows’:

We begin by assuming that there is no causal connection, and then we examine what ensues … [which], according to Kant, is the complete destruction of every form of representation, for the resulting disorder among phenomena would be such as to preclude the lasting subsistence of any sort of objectivity and even of any sort of consciousness. Consequently, Kant considers the hypothesis of the contingency of the laws of nature to be refuted by the mere fact of representation… Thus, causal necessity is a necessary condition for the existence of consciousness and the world it experiences. In other words, it is not absolutely necessary that causality governs all things, but if consciousness exists, then this can only be because there is a causality that necessarily governs phenomena.

Meillassoux’s Misreading of Kant’s Transcendental Deduction

Meillassoux’s account of both Kant’s reply to Hume’s problem and the Transcendental Deduction itself is problematic. It is true that at the outset of the Transcendental Deduction, Kant considers the issue of appearances without causal connection:

Appearances could . . . be so constituted that the understanding would not find them in accord with the conditions of its unity, and everything would then lie in such confusion that, e.g., in the succession of appearances nothing would offer itself that

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635 This is important to bear in mind, because it is one of two central features of Hume’s argument that Meillassoux fundamentally misconstrues. As we shall see, he assumes that Hume tacitly deploys probabilistic reasoning to support an otherwise dogmatic belief in the necessity of natural laws.
636 Ibid., 89.
638 AF, 89.
would furnish a rule of synthesis and thus correspond to the concept of cause and
effect, so that this concept would therefore be entirely empty, nugatory, and without
significance. Appearances would nonetheless offer objects to our intuition, for
intuition by no means requires the functions of thinking.  

As Allison notes, the ‘specter’ of the logical possibility that ‘nothing would be recognizable and
our experience would be nothing but … “a blooming, buzzing confusion”’ must be exorcised
if Kant is to demonstrate that the categories are not only the a priori rules for the thought of an
object of sensible intuition in general (i.e., regardless of the specific forms that intuition takes)
but also that they are necessary conditions of the objects of sensible experience. This
problem is indeed central to the argument of the Transcendental Deduction, but, pace
Meillassoux, it is not ‘refuted … by the mere fact of representation’ (or the fact that
‘consciousness exists’) and Kant does not conclude that ‘causal necessity is a necessary
condition for the existence of consciousness and the world it experiences’.

The trouble with Meillassoux’s interpretation is that it suggests that, for Kant, the world must
accord with the categories because otherwise consciousness could not exist; and given that
consciousness does exist, the world must accord with the categories. In other words, on this
interpretation, consciousness is possible because the world accords with the categories. The
difficulty here is that this interpretation is unable to establish that the categories are necessary
conditions of objects of sensible experience. At best, it establishes only that empirical reality
accords with the categories because otherwise empirical cognition would be impossible. One
way to clarify the problem is to note the difference between the following two claims: 1) that
causation in the empirical world is a necessary condition of the possibility of experience; and 2)
that causation is a necessary condition of objects in the empirical world. The first claim
suggests that Kant’s reply to the logical possibility of the chaotic scenario is that, because it is
incompatible with experience, then given that there is experience, it is simply not the case that
things are chaotic. In contrast, the second claim is that because empirical objects are governed

\footnote{CPR, A90–91/B123, 223.}

\footnote{Allison, Kant’s Transcendental Deduction, 9. Allison’s quotation is from William James (1950, 488). It is worth
highlighting here that in his notes (AF, 134, n.5) Meillassoux associates Kant’s conclusion that the categories
are the necessary conditions of empirical objects with the first step of the deduction, citing ‘specifically, sections
20 and 21’ in the B-Deduction. Interpretations vary widely, but on my reading this is not where Kant attempts to
demonstrate that empirical objects are governed necessarily by the categories. That conclusion is established only
in the second step of the deduction (specifically, sections 25 and 26 in the B-Deduction).}
necessarily by causation, the chaotic scenario is in fact impossible.

According to Allison, Kant defends the second and not the first claim, because ‘it does not suffice to appeal to the *de facto* conformity of appearances to the requirements of the understanding, since Kant insists that what is needed is a demonstration of their *necessary* conformity’. He continues: ‘for Kant it would not be enough to maintain that this conformity is necessary merely in the hypothetical or conditional sense that it is only to the extent that it occurs that we can apply concepts (including the categories) to nature and have what counts as experience, i.e., empirical cognition’. Which is why, he says, Kant ‘maintains that it [the accord between categories and appearances] must be shown to be necessary in a stronger (albeit not logical) sense’. 641 On Allison’s account, however, Kant argues that because ‘the transcendentally chaotic scenario’ could not be unified ‘in a single consciousness … [It is] ruled out on the grounds that it would be nothing to us qua cognizers.’ 642 That is, given that the categories are grounded in the unity of apperception (as the first step of the Deduction demonstrates) the only things that could be apperceived (i.e., brought to that unity) are those that conform necessarily to the categories (which is what the second step aims to establish). Hence, as Allison puts it, ‘[w]hatever is not apperceivable would be “nothing to me”, qua cognizer’, which means that although logically possible, the chaotic scenario ‘does not designate a really possible state of affairs that we could ever recognize as such [i.e., as a state of affairs]’. 643 In other words, such a chaotic scenario is impossible because the appearances of which it is comprised would not conform to the categories: such “appearances” would be ‘epistemically null … even “less than a dream”’. 644

Of course, this much could be granted by Meillassoux. He could agree that a condition of the possibility of apperception (i.e., consciousness) is that the empirical world conforms to the categories, and that, therefore, anything that does not so conform would be nothing for us. Crucially, however, on Meillassoux’s account, this cognitive fit between appearances and the categories is just a matter of what Allison terms ‘epistemic luck’, according to which ‘nature

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642 Ibid., 429.
643 Ibid.
644 Ibid. Of such a chaotic scenario, Kant writes that its ‘manifold of perceptions … would belong to no experience, and … be without an object, and would be nothing but a blind play of representations, i.e., less than a dream’ (A112, 235).
does in fact exhibit the kind of regularity that Kant posits, not that it must necessarily do so, except in the conditional sense that without it genuine empirical cognition would not be possible’. Against this view, Allison contends that ‘the necessity … Kant attributes to empirical cognitions … must be understood as normative’ and that he ‘attempts to show … how the categories make experience possible by demonstrating that, through their relation to the synthetic unity of apperception, they ground this normative necessity’. We have already seen this normative (or epistemic) necessity at work in my reconstruction of the Transcendental Deduction in the last chapter. There I noted that both the \textit{a priori} synthesis necessary for the representation of space and time as unities and the categorial synthesis of the manifold of spatiotemporal intuition have their origin in the synthetic unity of apperception, which, says Kant, ‘is the understanding itself’. It is for this reason that anything that appears to us must be compatible with the conditions of the unity of apperception and must, therefore, themselves stand under the (objectively valid or normatively necessary) rules of the understanding, i.e., the categories. So, although it is logically possible that ‘[a]pparances could . . . be so constituted that the understanding would not find them in accord with the conditions of its unity’, this transcendentally chaotic scenario is ruled out on the grounds that it could not be apperceived because it could not be subsumed under the categories. In other words, as Allison puts it, Kant denies the ‘performative possibility [of the chaotic scenario], i.e., the possibility of representing it to oneself’. So construed, Meillassoux’s error consists in assuming that, for Kant, the cognitive fit between apperception and appearances is simply a matter of luck. Although he is right to contend that Kant argues that we could not experience that which does not accord with the categories, he fails to note that this is because the representation of space and time as unities is a product of the understanding. Even if we set aside the thorny question of exactly how, according to Kant, the understanding affects sensibility so as to represent space and time as unities, what is important here is that for Kant this representation is generated \textit{by us}. That is, even if, as discursive knowers, our minds do not create the universe and its furniture, they nonetheless construct the representational...

\textsuperscript{645} Allison, \textit{Kant’s Transcendental Deduction}, 236. Allison defends Kant’s claim that the categories are the (normatively) necessary rules of empirical reality against Guyer who contends that the only necessity Kant is entitled to (with respect to the connection between the categories and empirical reality) is conditional necessity according to which ‘[n]ecessarily, if x is an object and we perceive x, then x is spatial and euclidean’ (1987, 366).

\textsuperscript{646} Ibid., 448.

\textsuperscript{647} CPR, B134n, 247.

\textsuperscript{648} Ibid., 449.
framework within which things appear to us. That is why the rules of the understanding germane to the unification of a sensory manifold in one consciousness (i.e., the categories) must apply to the spatiotemporal manifold, and why that to which the categories do not so apply is, cognitively speaking, nothing for us. Now, irrespective of the validity (or indeed the intelligibility) of Kant’s argument in the Deduction, it is, I think, simply mistaken to claim that Kant infers that causation (and the categories) must govern empirical reality because otherwise consciousness would be impossible. Indeed, it is also worth noting that if, as Meillassoux contends, Kant is supposed to have concluded that consciousness is possible because the physical world accords with the categories, then this would not even entail that everything in the physical world in fact accords with the categories. As Guyer argues, on this view Kant is at best entitled to the conclusion that only those things that we can experience satisfy the conditions that make that experience possible. Consequently, there may be objects in the empirical world that we could never come to experience simply because they do not accord with the categories. In short, Meillasoux’s interpretation of Kant’s argument does not entitle Kant even to the view that physical reality as such accords with the categories.649

This analysis suggests that Meillassoux’s interpretation of both Kant’s reply to Hume’s problem and the argument of the Deduction suffers from an assumptive and tenuous engagement with Kant’s argument. In addition to misconstruing Kant’s proof of the objective validity or necessity of the categories with respect to appearances, Meillassoux evidently misunderstands the way in which this is supposed to constitute a reply to Hume. It is true that Kant must address the chaotic scenario suggested by Hume’s billiard ball example; but pace Meillassoux, Kant’s ‘proof of causal necessity’ is not predicated on a ‘reductio ad absurdum’ of the chaotic scenario.650 His proof of causal necessity is not the result of demonstrating the incoherence of the chaotic scenario; rather, Kant’s proof is the Transcendental Deduction.

649 Guyer, Kant and the Claims of Knowledge, 366. According to Guyer, at most Kant is entitled only to the view that ‘whatever objects we happen to perceive happen to satisfy these conditions’ (1987, 366).

650 AF, 89. I have emphasised the word “suggested” here because Hume’s billiard ball example is not irreconcilable with Kant’s understanding of causation. Meillassoux registers this when he notes that a Kantian reply would highlight that Hume’s example is only in fact representable because ‘the context [e.g., the table on which the balls roll and the hall containing the table] remains stable’ but he is wrong to conclude that, for Kant, ‘Hume’s imaginary scenario of the billiard-balls is impossible’ (AF, 89). As I understand it, a Kantian reply would insist only that, in such a scenario, the balls are in fact subject to causation, indeed that they must be if they are to be perceived as an event comprised of successive states in a temporal sequence, and that consequently we are entitled to suppose that there is some cause and some natural law that accounts for their unexpected motion, even if we are incapable of identifying either.
More specifically, it is the second step of the Deduction, according to which appearances must conform to the categories, which – following the first step – are the rules by which discursive intelligence unifies objects of intuition in experience. In short, Kant’s argument is not that appearances must conform to the categories if consciousness is to be possible; it is that anything that does not appear in conformity to the conditions of the human mind could not be apperceived.

Unfortunately, the next crucial step in Meillassoux’s argument is similarly defective. Meillassoux attempts to refute Kant’s deduction by arguing that it is predicated on ‘the necessitarian inference’, according to which the evident ‘stability of laws presupposes, as its imperative condition, the necessity of those laws’. However, before turning to that problematic contention we need to note the central point he draws from his assessment of the standard replies to Hume.

**Meillassoux on Hume on Causal (or Ultimate) Necessity**

According to Meillassoux, despite their differences, ‘none of [these replies] ever calls into question the truth of causal necessity’. In each case, he argues, the existence of causal necessity is never seriously doubted because these solutions are not aimed at demonstrating whether causal necessity exists or not. Instead, each response is aimed at answering the question of how, if at all, the necessity of causation can be proved. Meillassoux contends that, whereas the metaphysical and transcendental replies never really doubt the ‘self evidence of the principle of causation’, Hume’s scepticism differs – but only insofar as he ‘doubts reason’s ability to prove causal necessity’. Accordingly, Meillassoux contends that ‘Hume … never really doubts causal necessity – he merely doubts our capacity to ground [it] through reasoning.’ In support of this claim he refers to a passage in the *Enquiry* where Hume asserts that although we might be able to ‘resolve … many particular effects into a few general causes … the causes of these general causes’, i.e., the ‘ultimate causes’ or ‘ultimate springs … are totally shut up from human … enquiry’. “This”, says Meillassoux, “is to concede that physical

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651 AF, 94.
652 Ibid., 90.
653 Ibid.
654 Ibid. In fact, Meillassoux contends that ‘Hume believes blindly in the world that metaphysicians thought they could prove’ (AF, 91). As we shall see, it is not obvious that Meillassoux is right about this.
processes are indeed possessed of ultimate necessity’. Now, Meillassoux may be right on this score. But simply to insist that ‘to be a sceptic is to concede that reason is incapable of providing a basis for our adherence to a necessity we assume to be real’ is not much of an argument, especially as one of the most prominent controversies in Hume scholarship concerns the question of whether or not he is a realist about causation and causal powers. Even a cursory look at the literature demonstrates that it is neither obvious that Hume ‘never really doubts causal necessity’ nor that he concedes that ‘physical processes are … possessed of ultimate necessity’.

Although I cannot here survey and assess the range of relevant interpretations, it is worth highlighting that the traditional (or ‘old’) reading of Hume takes a very different view from that advanced by Meillassoux. On the whole, as Millican points out, the traditional interpretation typically takes ‘causal necessity in the objects [to be] a function of regular patterns of behavior (“regularity all the way down”), and we are unable even to conceive of any kind of objective causal necessity that goes beyond this’. Ultimately, this is a result of Hume’s Copy Principle, according to which all simple ideas are copies of impressions. As we have seen, for Hume the source of the idea of necessary connection (i.e., causal necessity) is what Millican characterises as a ‘customary inference in response to observed constant conjunction’. So construed, on the traditional reading, ‘[c]ausation is … a matter of regularity or “constant conjunction”, together with the accompanying tendency of the mind to draw inferences accordingly’. Admittedly, Hume’s references to ‘ultimate causes’, ‘ultimate springs’, ‘secret powers’ and ‘those powers and forces, on which this regular course and succession of objects totally depends’ seem to suggest a belief that ‘[c]ausation exists, but we can know nothing of its

656 AF, 90.
658 [A]ll our ideas are nothing but copies of our impressions, or, in other words, that it is impossible for us to think of anything, which we have not antecedently felt, either by our external or internal senses … Complex ideas, may, perhaps, be well known by definition, which is nothing but an enumeration of those parts or simple ideas, that compose them. But … [b]y what invention can we throw light upon these ideas, and render them altogether precise and determinate to our intellectual view? Produce the impressions or original sentiments, from which the ideas are copied (2007, 7.4, 58–59).
ultimate nature’, as Galen Strawson puts it.660 Indeed, for Strawson, the most obvious and plausible interpretation of these expressions, especially when combined with his commitment to empirical sciences, is to take Hume as ‘a realist about causal power … to hold that there really is such a thing as causal influence … [i.e., that] there is something more in reality, causally speaking, than one thing’s just following another’.661 Although Strawson’s ‘new’ reading of Hume lends some support to Meillassoux’s contention that Hume simply believed in causation, the issue is not settled, not least because it is far from obvious that Hume’s use of words such as “powers” or “force” should be taken at ‘face value’, as Strawson insists.662 Millican emphasises that Hume repeatedly explains that terms such as “force”, “power” and “energy” are used vaguely in both common conversation and philosophical work, and that, for Hume, following his Copy Principle, understanding these terms entails an effort to clarify them and hunt down the simple impression upon which they are based.663 Thus, in the paragraph prior to his claims that ‘to throw light upon … ideas’ we must ‘produce the impression … from which [they] are copied’, he writes:

There are no ideas, which occur in metaphysics, more obscure and uncertain, than those of power, force, energy or necessary connexion, of which it is every moment necessary for us to treat in all our disquisitions. We shall, therefore, endeavour, in this section, to fix, if possible, the precise meaning of these terms, and thereby remove some part of that obscurity.664

And in a more strident passage from his abstract to the *Treatise*, Hume contends that, like the notion of causation, notions of force and power refer to habitual or customary inference:

[It is] commonly suppos’d, that there is a necessary connexion betwixt the cause and effect, and that possess something, which we call a power, or force, or energy. The question is, what idea is annex’d to these terms? … experience … only shows us objects contiguous, successive, and constantly conjoined. Upon the whole, then, either we have no idea at all of force and energy, and these words are altogether insignificant,

660 In the *Enquiry* Hume refers to ‘secret powers’ at 4.16 (35) and ‘powers and forces … on which objects … depend’ at 5.22 (53) – Galen Strawson, *The Secret Connexion: Causation, Realism, and David Hume* (Oxford: Oxford University Press, 2014), 166.
661 Strawson, *The Secret Connexion*, x.
662 Ibid., 165. Alongside Strawson as its most prominent proponent, the ‘new Hume’ camp also includes John P. Wright (1983) and Peter Kail (2010), among others. Against this camp stands the ‘old Hume’ camp which includes Millican and Kenneth Winkler (1991), and others. A thorough debate can be found in *The New Hume Debate* (Abingdon: Routledge, 2007).
or they can mean nothing but that determination of thought, acquir’d by habit, to pass from the cause to its usual effect.\textsuperscript{665}

While I cannot here settle the question of Hume’s commitment to causal realism, it is nonetheless clear that when his claims about force, powers, causation, etc., are understood in light of his empiricism, and in particular his Copy Principle, there is good reason to be sceptical of Meillassoux’s charge that he simply believed that ‘physical processes are … possessed of ultimate necessity’ or that he ‘believes blindly in the world that metaphysicians thought they could prove’.\textsuperscript{666}

**The Necessitarian Inference and the Frequentialist Implication**

Nonetheless, it is on this basis that Meillassoux contends that, unlike Hume himself, he will ‘finally take seriously what the Humean … *a priori* teaches us about the world, viz., … [that] from a purely logical point of view, any cause may actually produce any effect whatsoever, provided the latter is not contradictory’.\textsuperscript{667} ‘There can be no doubt’, he says,

that this is the evident lesson of reason … of the thinking whose only fealty is to the requirements of logical intelligibility – reason informs … that our billiard balls might frolic about in a thousand different ways (and many more) on the billiard-table, without there being either a cause or a reason for this behaviour. For if reason knows of no *a priori* other than that of non-contradiction, then it is perfectly compatible with reason for any consistent possibility to arise, without there being a discriminatory principle that would favour one possibility over another.\textsuperscript{668}

After upbraiding philosophers for ‘recusing the viewpoint of reason as obviously illusory and then … attempt[ing] to provide a rational foundation for this recusal, or to conclude that the latter cannot be rationally supported’, Meillassoux contends that the ‘obvious falsity of causal necessity is blindingly evident’. He then sets about undermining what he takes to be the remaining barriers to his ‘speculative position’, according to which ‘the causal connection cannot be demonstrated … simply because [it] … is devoid of necessity’.\textsuperscript{669}

\textsuperscript{666} AF, 91
\textsuperscript{667} Ibid., 90.
\textsuperscript{668} Ibid.
\textsuperscript{669} Ibid., 91. For Meillassoux ‘[i]t is our senses that impose this belief in causality upon us, not thought’, which is
For Meillassoux, in order to establish the speculative position, the real question that needs to be answered is ‘*how we are to explain the manifest stability of physical laws given that we take these to be contingent*’. How can we explain the evident regularity, stability and law-governed character of the universe and stick fast to the thesis that there is no necessity underpinning these laws and that stability? Meillassoux contends that the key impediment to finally jettisoning the illusion of causal necessity is Kant’s transcendental reply to Hume, because ‘the transcendental deduction uses an argument by *reductio* in order to infer from the absence of causal necessity the destruction of representation’. Because Kant’s reply to Hume purportedly rests on the view that an empirical world without causal necessity would be incompatible with the existence of consciousness (and hence, ‘nothing for us’) Meillassoux thinks that if he can demonstrate that this is not the case – that, ‘on the contrary the hypothetical suspension of causal necessity does not necessarily entail consequences that are incompatible with the conditions of representation’ – then he can undermine Kant’s deduction and thereby remove a key barrier to embracing the thesis that all things are necessarily and absolutely contingent. Fortunately, Meillassoux thinks there is a straightforward ‘logical fallacy inherent in the transcendental deduction’: it is ‘a mistake to infer, as Kant does, the destruction of representation from the non-necessity of laws’. Although Meillassoux concedes that ‘the stability of phenomena provides the condition for consciousness as well as for a science of nature’ it does not, he contends, follow that this stability requires causal necessity; and that is Kant’s error: ‘the necessitarian inference’, according to which we are led from ‘the incontestable fact of the stability of the laws of nature … the exceptionless stability of nature’s principle of uniformity … to the necessity of this uniformity … [i.e.,] from the fact of stability to an ontological necessity’. The inference runs as follows:

1. If the laws of nature could actually change without reason – i.e., if they were not necessary – they would frequently change for no reason.
2. But the laws do not frequently change for no reason.
3. Consequently, the laws cannot change for no reason – in other words, they are

why ‘a more judicious approach to the problem of the causal connection would begin on the basis of the evident falsity of this connection, rather than on the basis of its supposed truth’. ‘It is’, he says, ‘astonishing to note how in this matter, philosophers, who are generally the partisans of thought rather than of the senses, have opted overwhelmingly to trust their habitual perceptions, rather than the luminous clarity of intellection’ (AF, 91).

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670 Ibid., 92.
671 Ibid.
672 Ibid., 92–93.
673 Ibid., 93.
674 Ibid., 94.
Put more succinctly: If (1) the laws of nature were not necessary then they would change, but (2) they do not change, and hence (3) they are necessary. Meillassoux accepts premise 2, ‘which simply states the fact of the (manifest) stability of nature’, but not premise 1, which he dubs ‘the frequentialist implication’. And it is this implication that Meillassoux contends, ‘underlies [both] the Kantian argument in favour of causal necessity … and the common belief in this necessity’.  

Both the common thesis and the Kantian thesis rely on the same argument – viz., that contingency implies frequent transformation – differing only with regard to the … frequency which they infer from contingency (for the common thesis, the frequency would be low but manifest, while for the Kantian thesis, the frequency would be so high as to destroy representation). We must … take a closer look at the implication, and try to understand why it seems so obvious that Kant executes it without even bothering to justify it.

Now, Meillassoux may be right that the common belief in causal necessity is based on the evident stability of nature coupled with the view that ‘we would have noticed’ if physical laws were contingent, but his claim that Kant relies on the so-called necessitarian inference (and its frequentialist implication) stands in need of substantial textual and philosophical support.

Although Meillassoux’s support for this claim is ultimately based on the erroneous contention that ‘Kant considers the hypothesis of the contingency of the laws of nature to be refuted by the mere fact of representation’, the textual evidence he adduces for Kant’s purported view that the contingency of laws (i.e., absence of causation) would entail ‘the necessity of their frequent modification’ comes from two passages in the Critique, both of which are from the A-Deduction. 679 The first passage is as follows:

Unity of synthesis in accordance with empirical concepts would be entirely contingent [zufällig], and, were it not grounded on a transcendental ground of unity, it would be

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675 Ibid.
676 Ibid. We should note the repeated caveat ‘for no reason’ in his formulation of the inference. It is not at all clear what it means to say that natural laws change with or for (or without and not for) a reason.
677 Ibid.
678 Ibid.
679 Ibid., 106.
possible for a swarm of appearances to fill up our soul without experience ever being able to arise from it. But in that case all relation of cognition to objects also disappear, since the appearances would lack connection in accordance with universal and necessary laws, and would thus be intuition without thought, but never cognition, and would therefore be as good as nothing for us.\(^{680}\)

According to Meillasoux, this passage evidences an ‘inference from the possibility of contingency to the necessary frequency of its effectuation’. That is, ‘Kant infers from the assumption of the actual contingency of phenomenal laws modifications of reality so extreme that they would necessarily entail the destruction of the very possibility of knowledge and even consciousness’.\(^{681}\)

This is an odd interpretation. All Kant states is that, in the absence of a ‘transcendental ground of unity’, there may be a ‘swarm of appearances’ which would preclude their cognition. For such “appearances” would be ‘intuitions without thought’, i.e., ‘a blooming, buzzing confusion’. In other words, this is not a claim about the frequency of change of phenomenal laws based on an ‘assumption of [their] actual contingency’. In fact, it is not a claim about the change of ‘phenomenal laws’ at all. Rather, Kant’s claim is simply that in order to be experienced appearances must accord with certain \textit{a priori} conditions, i.e., the transcendental grounds of experience: causation and the categories.

In his notes in \textit{After Finitude} Meillassoux refers to another passage in support of his critique of Kant. He introduces the quotation by explaining that ‘Kant, having just hypothetically assumed the absence of necessity in the laws of nature, infers what the consequences of this contingency would be for nature’:\(^{682}\)

If cinnabar were now red, now black, now light, now heavy, if a human being were now changed into this animal shape, now into that one, if on the longest day the land were covered now with fruits, now with ice and snow, then my empirical imagination would never even get the opportunity to think of heavy cinnabar on occasion of representation of the color red.\(^{683}\)

\(^{680}\) CPR, A111, 234; AF, 116. For the sake of consistency I have used Guyer’s and Wood’s translation. Brassier’s translation of \textit{After Finitude} uses Kemp Smith’s 1929 edition of the \textit{Critique}, but (as he notes) he changes Kemp Smith’s translation of \textit{zufällig} as ‘accidental’ to ‘contingent’.

\(^{681}\) AF, 106.

\(^{682}\) AF, 136n 13.

\(^{683}\) CPR, A100–101, 229; AF, 136n 13.
Meillassoux contends that, in this passage, ‘it is indeed a frequent modification … which is posited … as the consequence of the contingency of laws’. ⁶⁸⁴ On the face of it, this is a fairly robust example of the frequentialist implication because Kant himself refers to this frequent modification after noting that, if ‘the manifold of … representations [did not] take[ ] place according to rules … our empirical imagination would never get to do anything suitable to its capacity’. ⁶⁸⁵ The trouble, however, is that Kant is asserting neither that in the ‘absence of necessity in the laws of nature’ appearances would therefore change frequently, nor that because appearances are in fact stable we can infer that they must accord with causal necessity. Indeed, neither in this passage nor Kant’s introduction to it, is he saying anything at all about causal necessity or necessary laws. He is merely noting that there are in fact regularities and consistency in appearances. Nonetheless, Kant does contend that ‘[t]here must … be something that itself makes possible this reproduction of the appearances [and hence the possibility of constant conjunction, for example] by being the a priori ground of a necessary synthetic unity of them’. ⁶⁸⁶ As Béatrice Longuenesse notes, however, that contention should be understood as a ‘program, not a conclusion’, because ‘[n]othing that came before entitles Kant to conclude that the regularity of the “appearances themselves” reveals the presence of a “ground of a necessary synthetic unity”’. ⁶⁸⁷

Kant’s programme becomes apparent in a somewhat surprising – because unexplained – shift from the association of appearances in an empirical manifold (his discussion of cinnabar) to examples of ‘pure[ ] a priori intuitions’ which include ‘draw[ing] a line in thought’, ‘think[ing] of the time from one noon to another’ and ‘represent[ing] a certain number to myself’. ⁶⁸⁸ Here, Kant contends that in all three cases ‘it is obvious that … I must necessarily first grasp one of these manifold representations after another in my thoughts’. He continues:

[I]f I were to always to lose the preceding representations (the first parts of the line, the preceding parts of time, or the successively represented units) from my thoughts and not reproduce them when I proceed to the following ones, then no whole representation and none of the previously mentioned thoughts, not even the purest

⁶⁸⁴ AF, 136n 13
⁶⁸⁵ CPR, A101, 229.
⁶⁸⁶ Ibid., A101, 230.
⁶⁸⁸ CPR, A102, 230.
and most fundamental representations of time, could ever arise.\textsuperscript{689}

His claim is this: just as it is necessary that each part of a line be maintained in imagination in order to synthesise its parts in a complete representation, so too is it necessary that each part of the impressions comprising the apprehension of an object must be maintained if I am to ‘form the sensible intuition of a conjunction of [their] impressions’.\textsuperscript{690} In the case of temporal succession, as Longuenesse explains,

in order to perceive that two or more representations (impressions or manifolds of impressions apprehended “as” manifolds) succeed each other, each of the elements of succession must be reproduced as one goes on to the next. Otherwise no succession and a fortiori no regularly repeated succession would be perceived: the empirical imagination would have no occasion to exercise its associative rules.\textsuperscript{691}

Although Kant’s examples of pure representations – of line, time and number – do not demonstrate that representations of empirical succession or conjunction must be themselves grounded in a synthetic unity governed by \textit{a priori} rules (for this, Kant will need to demonstrate the objective validity of the categories with respect to appearances) they provide a model which, according to Longuenesse, ‘at the very least … shows that for any representation of a manifold “as” a manifold, it is not enough that the manifold is \textit{given}’ because for such a representation ‘[a]n act of mental synthesis analogous to that grounding elementary mathematical constructions is necessary: not only a synthesis of apprehension but also … a synthesis of reproduction of each of the elements of an apprehended manifold, performed in order to constitute it as a complete series’.\textsuperscript{692}

This brief exposition is sufficient to show that Meillassoux has misread Kant’s well-known passage from the \textit{A-Deduction}. Indeed, it appears that he has in fact misappropriated the passage in order to support his claim that Kant relies on the necessitarian inference and its frequentalist implication. This passage is neither a response to the ‘hypothetical[ ] assum[ption] [of] the absence of necessity in the laws of nature’, nor an argument to the ‘necessity [of] the laws of nature’ from the evident stability of appearances. Instead, Kant’s

\textsuperscript{689} Ibid.
\textsuperscript{690} Longuenesse, \textit{Kant and the Capacity to Judge}, 41.
\textsuperscript{691} Ibid., 41–42.
\textsuperscript{692} Ibid., 42.
thought experiment serves as a means to enquire into the *a priori* grounds of the very possibility of constant conjunction. Following Hume, his approach is to deny that these grounds can be inferred from impressions themselves, and to insist, instead, that they must be found in our cognitive faculties. *Pace* Hume, however, Kant contends that these grounds are *a priori* and necessary – governing both the rules of apperception and the objects apperceived.

Before returning briefly to the root of Meillassoux’s misunderstanding (and pursuant misappropriation) of these passages, it is worth highlighting one more passage from the outset of the Transcendental Deduction. Here, immediately after raising the logical possibility that appearances might be such that they do not accord with the understanding’s conditions of unity, Kant explicitly denies that we are entitled to draw the necessitarian inference:

If one were to [attempt a reply to this scenario] … by saying that experience constantly offers examples of a regularity of appearances that give sufficient occasion for abstracting the concept of cause from them, and thereby at the same time thought to confirm the objective validity of such a concept, then one has not noticed that the concept of cause cannot arise in this way at all, but must either be grounded in the understanding completely *a priori* or else must be entirely surrendered as a mere fantasy of the brain. For this concept always requires that something *A* be of such a kind that something *B* follows from it *necessarily* and *in accordance with an absolutely universal rule*. Appearances may well offer cases from which a rule is possible in accordance with which something usually happens, but never a rule in accordance with which the succession is *necessary*.693

Here, in significant agreement with Hume, Kant clearly rejects the view that we are entitled to infer necessity from regularity.694 Indeed, in this passage he explicitly denies the legitimacy of a frequentialist implication: although we can generate rules on the basis of what ‘usually happens’ or the evident stability of nature, no amount of empirical evidence could demonstrate causal necessity, because ‘the concept of cause … must be … grounded in the understanding completely *a priori*’.

Although this passage is a striking confirmation of the inadequacy of Meillassoux’s engagement with the *Critique*, the central issue lies in his interpretation of Kant’s Deduction. As we have

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693 CPR, A91/B123, 223.
694 After all, the business of the Deduction concerns a proof of the causal maxim – that appearances must accord with causation.
seen, pace Meillassoux, Kant does not base the Deduction on the empirical fact that appearances are causally governed (or that they accord with the categories more generally). Again, Kant’s argument is that empirical reality must accord with the categories because the representation of space and time as unities (as a condition of apperception) entails that that which appears to us in space and time must accord with the categories (i.e., the rules according to which the understanding unifies objects of intuition in experience). This entails that although “appearances” that do not accord with the categories are logically possible, they could not be apperceived (at least by humans). Again, Kant’s contention is that, cognitively speaking, such “appearances” would be ‘as good as nothing for us’. So construed, it is clear that Kant does not (and indeed could not) infer causal necessity from the fact of ‘the stability of phenomena’, and consequently it is unsurprising that he did not ‘even bother[ ] to justify’ the frequentalist implication.

Nonetheless, it is this charge that Meillassoux marshals to argue that the absence of causal necessity does not entail ‘the complete destruction of every form of representation’. As we have seen, according to him, Kant’s error was straightforward: he simply assumed that the absence of causal necessity would rule out possible experience. But, asks Meillassoux:

> [H]ow is Kant able to determine the actual frequency of the modifications of laws, assuming the latter to be contingent? How does he know that this frequency would be so extraordinarily significant as to destroy the very possibility of science, and even of consciousness? By what right does he rule out a priori the possibility that contingent laws might only very rarely change – so rare indeed that no one would ever have the

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695 This raises the question of why Kant thought it necessary to overcome the spectre of the logical possibility of the non-conformity of appearances to the conditions of apperception. ‘The short answer’, according to Allison, is that ‘the logical possibility … is sufficient to make its exorcism necessary’. Furthermore, explains Allison, Kant addressed this challenge precisely in order to counter ‘a Humean-style skepticism that calls into question the normativity of empirical cognition by effectively reducing the conformity of appearances to the conditions of apperception to a matter of epistemological luck’. He continues:

Accordingly, it is to counter this challenge that Kant found it necessary to show that the concepts of a categorically structured experience and the unity of apperception reciprocally imply each other, which is another manifestation of the reciprocity between the unity of consciousness and the consciousness of unity that we have seen is the pivot on which the Deduction turns in both editions (2015, 436–437).

Otherwise put, Kant’s reply to the chaotic scenario is required to demonstrate that, because unity of apperception (as the grounds of the unification or subsumption of appearances under the categories, i.e., a priori laws) is dependent on the consciousness of unity (i.e., the possibility of bringing representations to the I think) that which appears, in order to be apperceived, must be able to be brought into a synthetic unity of consciousness, i.e., unified in a single consciousness.

696 AF, 89.
Before setting out Meillassoux’s own answer to these questions, it is important to stress that it is not at all clear that these questions stand in need of an answer at all. Given that Kant’s refutation of the transcendentally chaotic scenario is not based on an inference from the impossibility of its representation to the metaphysical (or ontological) necessity of causation there is no reason to suppose that Kant knows that the absence of this necessity would result in the frequent modification of laws such that representation would be impossible. Again, Kant’s argument is that causation (along with the categories) is a (normatively) necessary rule by which we apperceive. Consequently, those “appearances” that do not accord with causation do not appear. Kant’s point is that the necessity depends on us. The second step of the Deduction aims to prove that that which is represented in space and time – by virtue of the fact that this framework is itself generated by the understanding – accords with the rules of the understanding, which is why that which appears stands under the categories. Kant does ‘not rule out a priori the possibility that contingent laws might only very rarely change’ because ruling this either out or in has nothing at all to do with the argument of his Deduction. Indeed, it seems that Meillassoux’s critique of Kant’s idealism, and consequently the premise upon which he aims to undermine the purported challenge of Kant’s alleged necessitarian inference and the frequentialist implication upon which it is based, is entirely predicated on a fundamental misunderstanding of Kant’s argument. In short, Meillassoux presupposes a transcendentally realist interpretation, and critique, of Kant’s idealism and the argument of the Deduction. I return to this fundamental issue at the end of this chapter. First though, what of Meillassoux’s own answer to the question of how it is that Kant infers that the absence of causal necessity ‘would be so extraordinarily significant [that it would] destroy the very possibility of science, and even of consciousness’?

The Gambler’s Argument

Meillassoux’s answer is that Kant’s necessitarian inference and its frequentialist implication ‘implicitly rel[y] … on a piece of probabilistic reasoning’. According to him, ‘when Hume or

697 Ibid., 106.
698 Ibid., 95.
Kant assume that the necessity of laws is self-evident, their reasoning is exactly the same as that of a gambler faced with a loaded dice, because they implicitly assume the validity of the inference … that if physical laws were actually contingent, it would be contrary to the laws that govern chance if this contingency had never manifested itself. So, just as a gambler would infer that a dice was loaded if it invariably turned up a six, so too, contends Meillassoux, Hume and Kant infer that the universe’s laws are necessary. For if these laws were contingent, then, on the basis of chance, we would expect this contingency to be manifest in a frequent change of laws – which, for Kant, would render experience impossible. The ‘implicit principle governing the necessitarian inference’ consists in an extension of ‘the probabilistic reasoning which the gambler applied to an event that is internal to our universe, to the universe as such’. This reasoning, he says, construes ‘our own physical universe as one among an immense number of conceivable (i.e., non-contradictory) universes each governed by different sets of physical laws’. Each universe is construed as one face of a dice:

Then, for any situation given in experience, I roll these dice in my mind (I envisage all conceivable consequences of this event), yet in the end, I find that the same result (given the same circumstances) always occurs: the dice-universe always lands with the face representing “my” universe up, and the laws … are never violated. Every time it is thrown, the dice-universe invariably results in the same physical universe – mine, the one I have always been able to observe on a daily basis.

Thus, if we ‘implicitly assume the a priori principle … that ‘whatever is equally thinkable is equally possible … [i.e., a] quantative equality between the thinkable and the possible … [so that] one of two events has no more [mathematical] reason to occur than any other’, then we can infer that the dice are loaded. For if we invoke ‘the principle according to which events that are equally possible are equally probable’ it seems staggeringly unlikely that ‘throughout our entire lives, and even as far back as human memory stretches’ the same laws hold good and the same things occur and recur. ‘Consequently, [we conclude that] there must be a necessitating reason, albeit hidden … that explains the invariance in the result’. As we shall see shortly,

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699 Ibid., 97.
700 Ibid.
701 Ibid.
702 Ibid.
703 Ibid., 96.
704 Ibid., 96–97.
705 Ibid., 97. Meillassoux concludes that ‘the Humean-Kantian inference is an instance of probabilistic reasoning’ predicated on the following argument:
Meillassoux’s refutation of the necessitarian inference and its frequentialist implication consists in identifying contingency with a non-totalisable infinity that he opposes to the totality operative in the logic of chance. He contends that the latter, but not the former, is susceptible to probabilistic calculation on the basis of empirical evidence. However, before turning to this central feature of his argument we need to register two obvious problems.

First, the fact that neither Kant nor Hume rely on the necessitarian inference or frequentialist implication raises the following question: why does Meillassoux insist that the inference and its implication stand in need of refutation? On the one hand he rightly argues that the necessitarian inference is invalid because we cannot infer the necessity of causal law from the fact that the laws of nature have never changed. ⁷⁰⁶ On the other hand, however, he is compelled to refute the gambler’s argument, according to which the equi-probability entailed by the supposition that natural laws are contingent suggests that it is unfathomably unlikely that existent laws (rather than any number of logically possible laws) have always governed (and might forever continue to govern) the universe – which is why we can suppose that the dice are, in fact, loaded. Thus it seems that Meillassoux both contests the viability of inferring necessity from the fact of stability (i.e., the evident historical uniformity of the laws of nature) and concedes that the gambler is right to draw the same inference on the basis of the laws of probability.

Secondly, when Meillassoux represents possible universes as one of the many millions of faces of a dice, he develops Hume’s imaginary billiard-ball scenario in a humorous but problematic way. In one or other such universe, governed by a particular set of physical laws, he contends, ‘[t]he impact of two billiard-balls [may] result[ ] in both balls flying off into the air, or fusing together, or turning into two immaculate but rather grumpy mares, or into two maroon but

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⁷⁰⁶ It is again worth underscoring that neither Hume nor Kant would dispute this.
rather affable lilies, etc’. The trouble here, however, is that even if we agree with Hume that, logically speaking, ‘the falling of a pebble may … extinguish the sun; or the wish of a man control the planets in their orbits’ it is not clear that the same can be said of billiard balls turning into (grumpy) horses, (good natured) flowers, or, say, the concept of a Tuesday afternoon. There are at least two related issues that must be addressed before we can concede that such transformations are indeed logically possible (because non-contradictory). The first is this: what does it mean for an object to change over time? The second is this: what sense, if any, can be made of the notion of a grouchy or amiable plant (or a grouchy or amiable Tuesday afternoon)? Because these issues relate to long-standing problems concerning identity, change, conceivability and logical possibility, they cannot here be exhaustively discussed. Nonetheless, even a very brief discussion will help assess the plausibility of Meillassoux’s contention that such transformations and objects are indeed logically possible.

What might it mean for a billiard ball at $t_1$ to become a horse or a flower an instant later, at $t_2$? This is not a question about the possibility of a universe ‘governed by different sets of laws’. Indeed, this is not even a question of the coherence of the notion of change in the absence of a cause. Rather, the question concerns whether, regardless of the physical laws that are said to obtain in a given universe, an object (say, a billiard ball) could, in an instant, change into any object whatever. Now, we can readily concede that, through gradual alterations over time, object X at $t_1$ might change, moment by moment, part by part, so that at $t_n$ there is an object (Y) that shares no salient properties with object X. In a different vein we might even concede that it is logically possible for one object to disappear at one moment and for another object to appear in the same location at the next moment. Although these scenarios are not philosophically unproblematic, they do not entail any obvious contradiction. But can the same be said of the instantaneous change of one object into another, where the latter object is radically different from the former? One reason to think not is that an object’s change from one moment to the next requires that there is some qualitative sameness in the object at these two moments. For if not, the notion of change does not apply. After all, in what sense has an object changed from one moment to the next if the object at the second moment shares no (non-relational) qualities or properties with the object at the first moment? There are, of

\footnote{AF, 96.} \footnote{Ibid.}
course, significant difficulties in determining what counts as a shared quality or property and, therefore, in determining which qualities or properties are minimally required to maintain that a changed object retains at least something of its identity from one moment to the next. Whatever the difficulties here, however, it is nonetheless clear that a billiard ball and the concept of a Tuesday afternoon are not the sorts of thing that could turn into each other precisely because they are fundamentally different sorts of things: it is logically impossible for a billiard ball to turn into the concept of a Tuesday afternoon, just as it is logically impossible for a concept to be composed of spaghetti. Thus, it is clear even from this brief reflection that Meillassoux has not demonstrated that it is logically possible that anything can turn into anything else. Nonetheless, it is precisely this supposition that he hopes to vindicate by refuting the necessitarian inference and the gambler’s loaded dice argument.

Cantor, Non-Totalisable Infinity and the Limits of Probable Reasoning

According to Meillassoux, the application of probabilistic calculation on the basis of the logic of chance is possible in any system characterised by a numerical totality of possibilities. When the possible laws or sets of laws governing the universe are construed as a numerical totality and each set is construed as equi-probable on the basis of pure chance, then, following the dice analogy (where each set of laws constitutes one face of a dice with a vast totality of faces) the gambler is entitled to suppose that there is indeed a hidden necessity to existing laws because they have, so far as we know, always governed the universe. In contrast, Meillassoux contends that when conceivable (and hence, he says, possible) laws are not construed as a numerical totality then the loaded dice argument is undermined. For, in the absence of a totality of possible laws, or sets of laws, we have no basis upon which to calculate the improbability of the fact that a given set of equi-probable possible laws has always governed the universe; and

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70 Graham Harman registers these issues when he remarks that ‘it is unclear whether Meillassoux believes that in one instant a chunk of gold could be made of gold atoms, in the next made of neon atoms, later of dirt, then of miniature armies, then of large-scale armies, then a pack of feral dogs, and finally of all the odd-numbered buildings of rue Danton in Paris, with all these cases being equally gold’ (2015, 174). In the absence of a more careful engagement with the question of identity in relation to change and time, it is not at all clear that Meillassoux is entitled to the view that such radical transformations are in fact logically possible. For overviews of issues related to the metaphysics of identity and change see Ben Curtis and Harold Noonan (2018), and Andre Gallois (2016). On the relationship between conceivability and possibility see essays in Tamar Gendler and John Hawthorne (2011), esp. David Chalmers (145–200). For a lively reply to Chalmers, dealing with the question of whether vampires, floating iron bars, cats giving birth to pups, and rabbits on mars are logically possible see Tamler Sommers (2002).
consequently no basis upon which to suppose that this extraordinarily unlikely fact counts as evidence of the necessity of these laws.

Meillassoux’s refutation of the necessitarian inference begins by noting that ‘we now know … since Cantor’s revolutionary set theory … that we have no grounds for maintaining that the conceivable is necessarily totalizable’.\(^{710}\) At the heart of Cantor’s set theory is a demonstration that mathematical infinities are of different sorts and of different sizes. Despite the complexity of the theory, its essential features – and in particular those upon which Meillassoux relies – are fairly straightforward. Cantor argues that the power-set (which is the set of all sub-sets of the elements of a particular set) is always larger than the particular set.\(^{711}\) For example, for the set \{1,2,3\}, the power-set will include the empty set (which belongs to all sets and is denoted by \(\emptyset\)), and the following sub-sets: \{1\}, \{2\}, \{3\}, \{1,2\}, \{1,3\}, \{2,3\}, and \{1,2,3\}. Thus, the power set of \{1,2,3\} is \{\emptyset, \{1\}, \{2\}, \{3\}, \{1,2\}, \{1,3\}, \{2,3\}, and \{1,2,3\}\}. Consequently, the power-set of any set can be expressed in the formula \(P(S) = 2^n\), where ‘n’ refers to the numbers of elements in a set. In my example the power-set of \{1,2,3\} has 8 or \(2^3\) elements. Thus, Cantor’s theorem states simply that the cardinality (i.e., number of elements) in any set is smaller than the cardinality of its power-set. In finite sets this result can be shown by simple enumeration of the elements in a power-set. Crucially, we can recursively treat power-sets as sets, and following the same procedure demonstrate the cardinality of the power-set of a power-set with the formula \(P(S) = 2^n\).

When applied to infinite sets, however, the demonstration of Cantor’s theorem is less straightforward. The first thing to note is that Cantor proved that for any infinite set of natural numbers (as well as integers and fractions) the size or cardinality of the set is the same. For example, this means that a set of natural numbers from 1 to infinity is the same size as any sub-group of natural numbers (say, the even numbers to infinity, i.e., 2,4,6,8,10,12 …). The reason for this is that a one-to-one correspondence relationship (or ‘bijection’) can be established between these infinite sets. That is, we can, for example, pair-off all natural numbers (1,2,3,4,5,6 …) with all even natural numbers (2,4,6,8,10,12 …). The same is true of

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\(^{710}\) AF, 103.

\(^{711}\) See Cantor (1874) in Ewald (2005). For clear and comprehensive exposition of Cantor’s work on infinity and set theory see A. W. Moore (2015, Ch.8) and Mary Tiles (2004).
integers and fractions (e.g., we can pair of 1, 1, 2, 2, 3, 3, 4, 4, 5, 5 … with 1, 2, 3, 4, 5, 6, 7 …). One striking result of this is that the cardinality of all infinite sets of natural numbers (including integers and fractions) is the same. Crucially, however, Cantor argued that the same cannot be said of the power-set of a set of infinite natural numbers. Ultimately, the reason for this is that there can be no bijection (i.e., no one-to-one correspondence or pairing-off) established between a set of infinite natural numbers and the power-set of that set. This conclusion is reached by the so-called diagonal method which proves that the power-set of an infinite set of natural numbers will always include more numbers than those included in the set. Indeed, according to Cantor, from this it follows that, unlike any infinite set of natural numbers, the power-set of any infinite set of natural numbers is uncountable.\textsuperscript{712} Cantor’s theorem – that power-sets have greater cardinality than their sets – holds even for sets of infinite numbers.

For Meillassoux, the important point about Cantor’s theorem is that the results are recursive. That is, if we take the power-set of the power-set of an infinite set, the cardinality of that power-set will be larger than the cardinality of the first-order power-set; it will be a still greater infinity. This unending process, wherein infinite power-sets of infinite power-sets are always larger infinities underpins Meillassoux’s contention that we cannot presuppose the existence of a totality of possible outcomes which, he claims, is required to underwrite the probabilistic reasoning at the heart of the frequentalist implication and hence the necessitarian inference.

Harman usefully summarises Meillassoux’s argument, emphasising that unlike occurrences \textit{in} the universe – for which, like faces of a dice or faces on a set of die, probabilistic reasoning is legitimate – neither the universe nor its possible laws can be totalised because there cannot be an all-inclusive set of all sets; and therefore there is no possibility of developing a probabilistic

\textsuperscript{712} It is worth noting that prior to his work on infinite power-sets Cantor uses the bijection technique and diagonal argument to prove that the cardinality of infinite natural numbers (including integers and fractions) was different to the cardinality of infinite real numbers (including irrational numbers). Cantor demonstrated that although infinite sets pertaining to natural numbers (such as the set of odd or even numbers, or the set of integers, or the set of prime numbers) can be put into one-to-one correspondence with each other as countable or list-able infinites, there are infinite sets for which no such one-to-one correspondence is possible. He argued that any interval between integers (e.g., between 0 and 1) expressed in real numbers (e.g., numbers with indefinitely long decimal parts such as 0.14987… or 0.29563…) can be shown to contain more numbers than those of any countable infinite set of numbers. Thus Cantor’s surprising conclusion was that it is not the case that all infinities are of the same size or cardinality because some infinities (specifically, those pertaining to either the whole set of real numbers or any interval between integers expressed in real numbers) are always larger than the infinites expressed in countable (in particular, natural) numbers. Indeed, Cantor’s proof demonstrates that unlike infinities expressed in natural numbers, those expressed in real numbers are uncountable or innumerable.
there is no way to sum up the number of possible laws of nature. For here there is no way to totalize; we cannot stand outside of nature and calculate the possible number of laws so as to determine the probabilities that any one of them might change. Therefore, although we can speak of probability when dealing with intraworldly events such as elections, horse races, and coin-flips, we cannot use the words ‘probable’ or ‘improbable’ when describing alterations at the level of nature as a whole.\textsuperscript{713}

Leaving aside here the limitations of his deployment of Cantor’s theory of infinite sets, it is important to note that, for Meillassoux, the post-Cantorian concept of non-totalisable infinities demonstrates that ‘[L]aws which are contingent, but stable beyond all probability [are] conceivable.’\textsuperscript{714} His wager is that even though he has ‘not positively demonstrated that the possible is untotalizable … we have every reason to opt for [this hypothesis] … since it … allows us to follow what reason indicates - viz., that there is no necessity to physical laws – without wasting further energy trying to resolve the enigmas inherent in the’ contrary hypothesis, according to which, ‘conceivable possibilities constitute a totality’.\textsuperscript{715} In other words, if both hypotheses are plausible then we should opt for the one that confers the greatest philosophical advantage. Whereas the thesis that ‘conceivable possibilities constitutes a totality’ legitimises ‘the frequential implication, and thereby, the source of the belief in real necessity, the reason for which no one will ever be able to understand’ the thesis that conceivable possibilities do not constitute a totality enables us ‘to think the stability of laws without having to redouble them with an enigmatic physical necessity’. And thus, he says, by ‘Ockham’s razor’ we have the means finally to rule out Kant’s ‘transcendental objection which invariably infers an actual, random disorder of representations from the contingency of laws’.\textsuperscript{716}

But neither Kant nor Hume totalises the possible in order to secure the necessitarian inference. As I have demonstrated, Kant neither overtly nor tacitly relies on the frequentalist implication

\textsuperscript{713} Graham Harman, ‘Meillassoux’s Virtual Future’, Continent 1, no. 2 (2011), 84.
\textsuperscript{714} Meillassoux, ‘Potentiality and Virtuality’, in The Speculative Turn, ed. Levi R. Bryant, Nick Srnicek, and Graham Harman (Melbourne, Australia: Re.press, 2011), 230. Adrian Johnson (2011, 104–105) and Paul Livingstone (2015) have both queried Meillassoux’s use of Cantor’s theory. While both contend that the fact of non-totalisable infinity is insufficient to disqualify the probabilist argument Livingstone also notes that ‘it is not clear that Cantorian set theory has any direct application to the theory of possible worlds’ or that ‘Cantor’s theorems … have to be interpreted as showing the non-existence of a set of all sets’ (39).
\textsuperscript{715} AF, 107.
\textsuperscript{716} Ibid., 107–108.
to address the important ‘spectre’ of the logically possible chaotic scenario. So there is no evidence that he relies on probable reasoning to draw the necessitarian inference. Indeed, Kant is quite clear that no such inference can be drawn. Similarly, Hume neither relies on the frequentialist implication nor on probable reasoning to infer the necessity of causal laws. As we have seen, there is good evidence to suggest that Hume denies causation, and moreover no evidence to suggest that he deploys probable reasoning to draw the necessitarian inference. Indeed, there is little reason to suppose that either Hume or Kant would at all disagree with Meillassoux’s claim that the logical contingency of laws is entirely compatible with their stability. Kant accepts both the logical contingency of causation and its normative necessity.

This returns us to the question of why Meillassoux thinks the evident stability of laws constitutes a barrier to accepting their contingency in the first place. When he contends that we should choose the thesis of the non-totalisable (or non-all or non-whole) set of possibilities of hyper-Chaos over the thesis that ‘conceivable possibilities constitute a totality’ this is supposed to help avoid certain enigmas, in particular the question of why laws we take to be logically contingent have never changed (so far as we know). And this is why the philosopher-cum-gambler is right to suppose that there is a hidden necessity or a hidden reason that might account for the profoundly unlikely stability and eternality of these laws. The trouble with this approach, however, is that the frequentialist implication is just a bad argument. The fact that physical laws are contingent does not entail that they would in fact change – either frequently or rarely. And this remains the case whether we assume a total or non-total range of possibilities. Similarly, the fact that, so far as we know, the universe’s most fundamental laws have been and remain stable and uniform provides no basis upon which to deduce that these laws are logically (or metaphysically or physically) necessary. Now, Meillassoux might complain that such a limited view of what is logically possible is of little help when fleshing out an ontology of hyper-Chaos, but this is not a good reason to accept bad arguments.

Meillassoux’s approach evidently turns on the view that Kant’s deduction of the objective validity of the categories (and in particular causal law) begins from the fact that we are just incredibly lucky that reality is such that it accords with the categories. Indeed, given the logical possibility that reality might not accord with categories – that it might, for example, change so frenetically so as to preclude the possibility of its cognition – we are so lucky that it cannot be
luck at all; it must be that reality necessarily accords with the categories. On this view, Kant infers the objective necessity of the categories from the fact that categorial cognition is possible. More specifically, Meillassoux’s contention is that, for Kant, if it were really the case that the rules of reality were not necessitated in such a way that they accord with the categories then, following the laws of probability, we would expect the rules of reality to change – and indeed to change often – such that experience would be impossible. And given that reality is not chaotic we can infer that reality must accord with the categories. However, according to Meillassoux, that conclusion follows only if we assume that there is a totality of possible laws, since in the absence of such a totality, probable reasoning has no purchase. Now Meillassoux might be right that probable reasoning concerning likelihood depends on the assumption that there is a totality of possible outcomes and that if each outcome is construed as equi-probable it would be miraculously unlikely if there were only ever, in fact, one particular outcome. But Kant’s argument has nothing at all to do with probable reasoning, and consequently there is no reason to suppose that he tacitly relies on the view that what is possible is totalisable.

If Allison’s interpretation is correct, then Kant’s contention that empirical reality accords with the categories has nothing to with luck, or indeed with probability. 717 Now, it may be that Allison’s interpretation is mistaken and that Meillassoux is correct to contend that Kant’s

717 Two points should be noted here. The first – which I have already noted in the previous chapter – is that for Kant, although particular empirical laws must ‘stand under the categories [these laws] cannot be completely derived’ (B165, 264) from them. Knowledge of particular laws of nature requires experience. The consequence of this is that although we are entitled to the view that nature is governed by laws there is no guarantee that we will ever come to know these laws. The second point is that even if we rule out what Allison refers to as ‘the transcendentally chaotic scenario’ (on the basis that such a scenario could not be brought to the conditions of apperception) this does not rule out, as Kant explains in the Critique of Judgment (2000, 5:185, 72), the possibility that ‘the specific diversity of the empirical laws of nature together with their effects could ... be so great that it would be impossible for our understanding to discover in them an order we can grasp ... [one] not fitted for our power of comprehension’. As Allison notes (2015, 429) writers are apt to elide the difference between the ‘transcendently chaotic scenario’ and the ‘empirically chaotic scenario’. Interestingly, Allison argues that while Kant rules out the former scenario as inconceivable because the rules of the understanding ‘prescribe[ ] laws to nature’, the latter scenario remains conceivable even though ‘it is rendered idle by requiring that in our reflection on nature we proceed as if it possesses a cognizable order’, which is the ‘principle of the logical purposiveness of nature’ (2015, 429). I cannot here address Kant’s reply to the ‘empirically chaotic scenario’ but the evidence suggests that Meillassoux does indeed elide the distinction between Kant’s assessment of the transcendental rules underpinning empirical reality, and other empirical laws. The clearest example of this is in his treatment of possible worlds in Science Fiction and Extro Science Fiction (2015, 30–40) in he which contends against (his understanding of) Kant’s deduction that ‘[a] world in which the conditions of science disappear is not necessarily a world in which the conditions of consciousness are abolished as well’ (40). While for Kant the foundations of empirical science do indeed lie in the categories, this does not entail that our understanding will in fact be able to subsume everything that appears in empirical reality under scientific laws – try as it must. Kant’s assessment of empirical laws and the activities of science suggest a far richer conception of natural laws than Meillassoux’s treatment implies.
Deduction tacitly relies on probabilistic reason shored up by the presupposition that what is physically possible is totalisable. If so, Meillassoux has indeed hit upon a novel approach that may well undermine Kant’s deduction of the necessity of the categories and reinforce the thesis of the necessity of contingency. In fact, this approach has the merit of being predicated on the very (hidden) strategy upon which he takes Kant’s deduction to rely. After all, if Kant is entitled to rely on probable reasoning to infer the necessity of causation, then Meillassoux is entitled to undermine that inference by demonstrating that probable reasoning (by which such an inference is in fact legitimised) tacitly requires the assumption that what is possible is totalisable. All this, however, seems highly improbable, not least because, as both Hume and Kant contend, no amount of empirical evidence could establish the necessity of causation. Indeed, even if Meillassoux were right that Kant’s transcendental deduction turns on the extraordinary improbability of the existence of the specific laws of nature required for the possibility of consciousness, such an argument would not even show – as Guyer complains – that Kant is entitled to the conclusion that empirical reality as such does in fact accord with the categories.718

Towards the Mathematisation of the Great Outdoors

I now turn to the concluding component of Meillassoux’s argument in After Finitude. This concerns his efforts to prove finally that ‘all those aspects of the object that can be formulated in mathematical terms can be conceived only as properties of the object in itself’ and thereby to explain how knowledge of the ancestral (of that which is whether we are or not, i.e., the thing in itself) is possible.719 Despite the advantages conferred by the ‘ontological hypothesis’ that what is possible is non-totalisable, Meillassoux concedes that that thesis ‘has not itself been engendered as a truth by means of speculative reasoning’.720 Proving that thesis would, he says, require us to ‘derive the non-totalization of the possible from the principle of factiality itself’.721 And in so doing ‘we would have to derive the non-whole as a [third] figure of factiality’ which

718 See page 211, note 649. Guyer’s argument is that Kant has only demonstrated that what we experience satisfies the conditions that make experience possible which means that there may be objects in physical reality that we could not experience. The upshot, for Guyer, is that Kant’s argument does not prove that physical reality as such accords with the categories.
719 AF, 3.
720 Ibid., 110.
721 Ibid.
‘would entail absolutising the transfinite’ and conceiving it ‘as an explicit condition of contingent being’.\(^{722}\) Such an enterprise ‘would be a question of establishing that the [innumerable] possibilities of which chaos – which is the only in-itself – is actually capable … allows the impeccable stability of the visible world’.\(^{723}\) That is, the central task of such a derivation would be to provide an argument by which to ground the stability of empirical reality on the non-totalisability of what is possible, i.e., the absolute contingency of hyper-Chaos. Now, Meillassoux clearly thinks this can (and must) be done, but he contends that the difficulty is that ‘such a derivation … would have to demonstrate how a specific mathematical theorem [i.e., Cantor’s theorem of infinite sets]… is one of the absolute conditions of contingency’.\(^{724}\) Given the difficulties of such a task, Meillassoux concedes that we could rest content with the ‘hypothetical resolution of Hume’s problem, since [it] seems sufficient to vanquish the objection from physical stability which provided the only “rational” motive for not simply abandoning every variant of the principle of reason’.\(^{725}\) But, he maintains, doing this would still leave unsolved the ‘problem of the ancestrality’ because a solution to that problem ‘demanded an unequivocal demonstration of the absoluteness of mathematical discourse’.\(^{726}\)

As I have noted, Meillassoux does not resolve this issue in *After Finitude*, and despite a more focused effort in his later work the problem remains.\(^{727}\) Nonetheless, in the final chapter

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\(^{722}\) Ibid.

\(^{723}\) Ibid., 111. Despite the fact that it is far from clear that such an enterprise is required, Meillassoux believes that its upshot would be a proof of a speculative materialist ontology according to which the three figures of factiality (non-contradiction, existence, and the capacity of what is actual and possible to be expressed in mathematics) are properties of the absolute, or things in themselves.

\(^{724}\) Ibid.

\(^{725}\) Ibid.

\(^{726}\) Ibid. It strikes me that Meillassoux’s evident support for the legitimacy of probabilistic inference (whether based on a totality or non-totality of possibilities) *presupposes* the ‘absoluteness of mathematics’. For the only way in which such an inference *could* stand in the way of accepting the ontological truth of the necessity of everything’s contingency is if mathematical probabilities could in fact demonstrate necessity (whether logical, ontological, or physical). As such, it seems Meillassoux assumes what he seeks to prove.

\(^{727}\) He concludes TWB (12) as follows:

> Now my project consists of a problem which I don’t resolve in *After Finitude*, but which I hope to resolve in the future: it is a very difficult problem, one that I can’t rigorously set out here, but that I can sum up in this simple question: Would it be possible to derive, to draw from the principle of factiality, the ability of the natural sciences to know, by way of mathematical discourse, reality in itself, by which I mean our world, the factual world as it is actually produced by Hyperchaos, and which exists independently of our subjectivity? To answer this very difficult problem is a condition of a real resolution of the problem of ancestrality, and this constitutes the theoretical finality of my present work.

His subsequent effort in ‘Iteration, Reiteration, Repetition’ also comes up short. Here, he concludes that although ‘the meaningless [i.e., mathematical] sign has as its condition … the necessary contingency of all things… [he has]
Meillassoux insists that the only way in which to vindicate the “literal meaning” of ancestral claims, and indeed the general capacity of thought to know the absolute (i.e., that which is in itself) via the mathematisation of what is actual (i.e., nature, its laws and the objects therein) is the ‘absolutizing [of] “the” mathematical’. Thus, Meillassoux reformulates Kant’s question of ‘how ... pure natural science [is] possible’ into the question of ‘how a mathematized science of nature is possible’.\textsuperscript{728} Answering that question requires, he says, ‘a twofold absolutization of mathematics’: an ‘ontical’ absolutisation pertaining to ‘entities that are possible or contingent but whose existence can be thought as indifferent to thought’ and an ‘ontological’ absolutisation ‘of the Cantorian non-All … about the structure of the possible as such, rather than about this or that possible reality’.\textsuperscript{729} Crucially, the second absolutisation would establish ‘that the laws of nature derive their factual stability from a property of temporality that is itself absolute, which is to say, from a property of time that is indifferent to our existence, viz., that of the non-totalizability of its possibilities’.\textsuperscript{730}

Although he has yet to derive the absolute scope of mathematics from contingency, such a derivation – which is the realisation of ‘thought’s absolutizing scope’ – is ‘urgent… given the extent to which the divorce between science’s Copernicanism and philosophy’s Ptolemaism has become abyssal, regardless of all those denials that serve only to perpetuate this schism’. Thus, Meillassoux concludes, ‘we can only hope that the problem of ancestrality succeeds in waking us from our correlationist slumber, by enjoining us to reconcile thought and absolute’.\textsuperscript{731}

In other words, in order to put the final nail in the correlationist coffin and so vindicate the “literal meaning” of mathematical claims about reality, we must absolutise the scope of mathematics via a factial derivation (i.e., a derivation from absolute contingency) of Cantor’s theorem.

Before concluding this chapter, there is a fundamental but straightforward problem concerning

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\textsuperscript{728} Kant, \textit{Prolegomena}, §14, 46; AF, 126.
\textsuperscript{729} AF, 127.
\textsuperscript{730} Ibid.
\textsuperscript{731} Ibid., 128.
Meillassoux’s conception of the time of hyper-Chaos that must be noted. Let us recall his vivid characterisation of the time represented by hyper-Chaos and absolute contingency. It is, he says, a time capable of destroying both things and worlds, of bringing forth monstrous absurdities … of engendering random and frenetic transformations … capable of destroying, without cause or reason, every physical law … capable of destroying every determinate entity… the eternal and lawless possible becoming of every law. It is a Time capable of destroying even becoming itself by bringing forth, perhaps forever, fixity, stasis, and death.  

This lawless time of the in-itself – of absolute possibility – underpins intra-worldly chronological time, i.e., the time of cosmology and ancestrality. The trouble here, however, is that this grand ontological time of hyper-Chaos seems capable of undermining Meillassoux’s contention that only the bluntly realist meaning of ancestral statements is coherent. If the time of hyper-Chaos is as lawless as Meillassoux contends, then for all we know the arrow of time has changed radically, even frenetically. In the absence of restrictions on that possibility, it is far from obvious that what Meillassoux takes to be the realist meaning of ancestral statements is not based simply on the supposition that time has, in fact, proceeded in a straightforwardly chronological manner. Now, there may be solid empirical evidence for that supposition but I see no reason to assume that that evidence rules out the possibility that we are profoundly mistaken about what in fact occurred, when and how. Admittedly, we are ill-equipped to conceive exactly how such chaotically shifting laws and temporal sequencing could be compatible with the evidence of the empirical sciences, but – as Meillassoux himself insist – this is not sufficient to refute the possibility that this is indeed what occurred. After all, this is a lawless ‘hyper-Chaos, for which nothing [save contradiction and the existence of nothing] is … impossible, not even the unthinkable’. The problem, as Christopher Watkins puts it, is that

Meillassoux’s hyperchaos is not chaotic enough … it exempts temporality. Truly radical contingency cannot simply mean that ‘anything can not be’, but it must also entail that ‘anything can have not been’. In other words, contingency is emasculated if it is confined to the present. Why should we exempt ‘past’ events from radical contingency, and why should we exempt temporal flow and the necessary progression of one instant after another in orderly fashion from radical contingency? Surely such a temporally strait-laced contingency would be no longer radical, but rather would be itself

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732 AF, 64.
733 Ibid.
contingent on time.\textsuperscript{734}

Indeed, this issue is the ontological flip-side of Brassier’s contention, discussed in Chapter 1, that a simple change in perspective is sufficient to demonstrate that chronological time is indeed tied to our intuitive framework, which is why he claims ‘[t]he only hope for securing the unequivocal independence of the ‘an sich’ must lie in prizing it free from chronology as well as phenomenology’.\textsuperscript{735}

Conclusion

In this chapter I have argued that Meillassoux’s characterisations of Hume’s and Kant’s responses to Hume’s problem of induction are highly problematic. On the traditional interpretation of Hume’s argument, there is no reason to suppose that Hume ‘never really doubts causal necessity’ or that he simply believes that ‘physical processes are … possessed of ultimate necessity’. On that view, Hume is robustly sceptical of both.\textsuperscript{736} Meillassoux’s characterisation of Kant’s reply to Hume’s problem in the Transcendental Deduction is more pressing. He is of course right to note that Kant’s reply to Hume’s scepticism frames the Transcendental Deduction. Here, Kant does indeed consider the logical possibility that appearances might be such that they preclude the possibility of experience. However, Meillassoux’s contention that Kant refutes this possibility by ‘the mere fact of representation’ indicates a fundamental misunderstanding of the argument of the Deduction. If, as Meillassoux claims, Kant rules out the possibility of the ‘transcendentally chaotic scenario’ on the basis that consciousness exists but could not exist were such a scenario to obtain, this would not demonstrate that empirical reality is governed, necessarily, by causation. At best it would suggest that we are very fortunate that at least some features of the physical world – those that we can experience – just are, in fact, governed by causation. This is a far cry from Kant’s aim of proving that the categories apply necessarily to empirical reality. I agree with Allison that

\textsuperscript{734} Christopher Watkin, \textit{Difficult Atheism: Post-theological Thinking in Alain Badiou, Jean-Luc Nancy and Quentin Meillassoux} (Edinburgh: Edinburgh University Press, 2013), 153. In fact, for Watkins, a genuine notion of hyper-Chaos – one in which ‘[e]verything could actually collapse: from trees to stars, from stars to laws, from physical laws to \textit{logical laws}’ (AF, 53, my emphasis) – would call into question the very stability of the concepts of possibility and impossibility upon which Meillassoux relies.

\textsuperscript{735} Brassier, \textit{Nihil Unbound}, 59.

\textsuperscript{736} This is not to say that the traditional view is the last word on these matters, but it is to say that Meillassoux relies on a tendentious reading of Hume.
although he does not – and could not – refute the logical possibility that appearances might not accord with the categories, Kant’s Transcendental Deduction is aimed at establishing the objective validity or normative – i.e., epistemologically rule governed – necessity of the categories with respect to empirical cognition, and hence with respect to what appears. That necessity is grounded in the synthetic unity of apperception, i.e., the understanding. Consequently, what appears to us as an appearance, i.e., as a sensory manifold in a spatiotemporal manifold, must stand under the rules by which the representation of such a manifold is unified in consciousness. Whatever the difficulties with this interpretation of the Deduction, it is clearly more compelling than the view that empirical reality just happens to accord with the categories, not least because on that view it is obvious that Kant is not entitled even to suppose that empirical reality as such accords with the categories.

Meillassoux’s misunderstanding of the Deduction is central to his contention that it is underpinned by the so-called ‘necessitarian inference’. According to Meillassoux, Kant’s deduction consists in an inference ‘from the fact of stability to an ontological necessity’. On this view Kant infers the ontological necessity of causal law from a frequentalist implication, according to which the contingency of the laws of nature (as represented in Hume’s billiard-ball scenario) would entail ‘the necessity of their frequent modification’ rendering experience impossible. Accordingly, Kant infers from the fact that laws are stable, and do not change frequently or even at all, that they must be necessary. Meillassoux draws support for this contention from two passages in the Critique. I argue that he mischaracterises both because neither expresses the view that the contingency of physical laws would produce ‘modifications of reality so extreme [or frequent] that they would necessarily entail the destruction of the very possibility of knowledge and even consciousness’. In both cases, Kant (following Hume) is explicitly denying that we are entitled to infer causation from the mere fact of stability or indeed from the chaos that would ensue in the absence of causation. It seems that Meillassoux has Kant’s argument the wrong way round. His claim is not that we infer the necessity of causation with respect to reality on the basis of the fact that it would be otherwise unfit for the possibility of experience (because everything would be random and chaotic). Rather, we infer the impossibility of such a random and chaotic scenario on the basis of the normative necessity

737 AF, 106.
738 Indeed, for Kant, no such inference could be possible.
of causation with respect to possible experience. Kant’s point is that empirical reality must stand under the categories. And it must do so because the categories are the normatively necessary or objectively valid rules of apperception. Again, if, as Meillassoux contends, Kant inferred the necessity of causation from the impossibility of the chaotic scenario, then the fact that empirical reality accords with the categories would be a matter of chance, mere luck, a contingent fact. That is why Meillassoux is wrong to claim that ‘Kant considers the hypothesis of the contingency of the laws of nature to be refuted by the mere fact of representation.’ In other words, Kant does not (and could not) infer causal necessity from the logical possibility of contingency and the chaos to which this would give rise. Instead, he infers the de facto or real impossibility of the logical possibility of contingency (with respect to empirical reality) from the normative incoherence of such an empirical reality. Unfortunately, Meillassoux’s critique of the gambler’s loaded dice argument and the probable reasoning upon which it is based is predicated on this misreading of the argument of Kant’s Transcendental Deduction.

Meillassoux contends that both Hume and Kant tacitly rely on probabilistic reasoning to draw the necessitarian inference. Specifically, they both implicitly assume that ‘if physical laws were actually contingent, it would be contrary to the laws that govern chance if this contingency had never manifested itself.’ It is, however, far from clear that either makes such an assumption. The evidence suggests that Hume maintains both that we have a rational warrant for inductive reasoning and that we are simply incapable of proving that laws are necessary or that nature is necessarily uniform. Consequently, I see no reason to suppose that he either tacitly or explicitly infers the necessity of laws from the improbable fact of their uniformity. Indeed, there is no reason to suppose that he should do so because there is no means to infer necessity (whether logical, metaphysical or physical) of physical laws from the fact of their uniformity, regardless of how improbable we take that uniformity to be.

Meillassoux’s efforts to undermine the legitimacy of the gambler’s necessitarian inference via a defence of Cantor’s theory of non-totalisable infinities is clearly predicated on the view that Kant’s deduction works – if it works at all – only if he can show that the fact that the physical world accords with the categories is not in fact simply a matter of luck or chance. In this respect Meillassoux’s argument has the virtue of recognising that such incredibly good fortune would

739 AF, 95.
not actually entitle Kant to claim that empirical reality is governed necessarily by the categories. And this is why, it seems, Meillassoux deploys the ingenious assertion that the argument of Kant’s Deduction tacitly relies on probabilistic reasoning. Given the logical possibility that physical reality might not accord with the categories, and the vast array of logically possible physical realities that might not accord with the categories, probable reasoning suggests that Kant (now a gambler) is right to infer the necessity of causation (and hence the stability of physical laws) from the extraordinarily improbable fact that physical reality just is such that it accords with the categories and is therefore compatible with the existence of consciousness. In other words, Meillassoux contends that Kant’s deduction of the necessity of the categories with respect to empirical reality tacitly relies on probabilistic reasoning to demonstrate that the cognitive fit between the world and the categories is not, in fact, just a contingent fact.

Now, it seems that for Meillassoux such an argument would indeed provide a solid basis upon which to infer – though not, it seems, prove – the necessity of causation with respect to physical reality, which is why he thinks it must be overcome if he is to maintain the thesis of the necessity of everything’s contingency. To this end, he argues that the legitimacy of the probabilistic reasoning underpinning Kant’s necessitarian inference is grounded on the assumption that what is ontologically possible is totalisable. For it is only on this basis that Kant is able to determine the staggering degree of improbability entailed by the fact that physical reality just does accord with the conditions necessary for consciousness. Aided by Cantor’s theory of infinities Meillasoux aims to undermine the argument from improbability via the hypothesis that the ontological possibilities of reality are in fact non-totalisable and, he contends, consequently resistant to the reasoning upon which the gambler’s loaded dice argument rests. Thus, Meillassoux argues, if what is physically possible is in fact non-totalisable, then any event – whether the enduring and eternal stability of existent physical laws or their complete destruction – is in fact as eternally likely as any other. Such an ontological picture supports the thesis that anything at all (except that which is proscribed by the figures of factiality) is actually possible. Indeed, he contends that were he able to ‘derive the non-totalization of the possible from the principle of factiality itself’ he could not only prove that the mathematics of infinities refer to, and pertain to, hyper-Chaos (as the grand thing in itself) but also pave the way to a proof of the absolute reach of ‘mathematical discourse’ that might finally solve the problem of the ancestral by demonstrating that the mathematisable properties
of both what is possible and what is actual are properties of things in themselves.

But even if a ‘factual derivation’ of the mathematical ontology of hyper-Chaos could prove the absolute reach of mathematical discourse, it is far from obvious that this is required to resolve the question of the compatibility of contingent laws and the evident stability of empirical reality, since that question does not stand in obvious need of a solution. For there is no incompatibility between the logical (or ontological) contingency of physical laws and their eternal stability, not least because no amount of empirical evidence, and consequently no probabilistic reasoning – regardless of whether we assume a total or non-total range of possibilities – could count as evidence for or against that contingency, still less serve as a proof or refutation. Indeed, I take it that this is Hume’s point and, moreover, one with which Kant is in complete agreement.

Let me conclude this chapter by stressing a fundamental issue; namely that Meillassoux’s argument relies on a serious (though, as we have seen, common) misunderstanding of Kant’s Transcendental Deduction, premised on both a transcendentally realist picture of physical or empirical reality and a fundamental failure to grasp the point of Kant’s idealism. Meillassoux’s understanding of Kant’s Deduction is transcendentally realist because he assumes that it consists in an attempt to prove that the physical world must itself accord with the categories because otherwise experience would be impossible. As we have seen, on this view it is merely a contingent fact – a happy coincidence – that the world accords with the conditions of experience; for it is entirely possible that it might not. So construed, the coherence of our experience does not depend chiefly on the transcendental conditions of experience, but on how the world just happens to be. Now, to Meillassoux’s credit, he seems to recognise that such a conformity could not demonstrate the objective validity or necessity of that conformity, which is why he asserts that Kant’s deduction is actually tacitly predicated on the gambler’s loaded dice argument. However, in addition to the fact that such an argument could establish neither the objective validity or necessity of the categories with respect to empirical reality, nor undermine the real possibility of the transcendentally chaotic scenario, this approach merely doubles down on the transcendentally realist interpretation. For on this view Kant’s proof of the objective validity of the categories is now a matter of showing that there is a reason or a hidden cause in nature that somehow accounts for why empirical reality is itself governed by
rules that conform with the categories. However, this conception of the conformity of appearances to the categories is simply incapable of accounting for the objective validity or normative necessity of the categories with respect to empirical cognition and hence with respect to appearances. Again, Kant’s deduction aims to demonstrate that only those representations that meet the transcendental conditions of apperception count as objectively valid, i.e., count as appearances. It is because the transcendental ground of that objectivity is the categories, which are themselves grounded in the synthetic unity of apperception – which Kant identifies with the understanding – and because that unity is responsible for the sensible representation of space and time as a unified manifold, that the categories are the normatively necessary rules of appearances. As Allison explains, this thesis is ‘transcendently idealistic because it assumes that the objects for which it provides the normative ground of judgment are objects qua subject to the conditions of our cognition, i.e., epistemic conditions, rather than either objects as such or as they are in themselves’.740 At the heart of Kant’s idealism is the claim that that which is represented in a unified spatiotemporal manifold is governed necessarily by those rules which are apposite to the empirical cognition of objects (i.e., appearances) in such a manifold. It is because these rules stem from, and are grounded in, the understanding that nature or empirical reality ‘depends on us’, at least insofar as it counts as an appearance.

In the next chapter I argue that it is this mistaken transcendentally realist conception of Kant’s idealism that underpins Meillassoux’s assertion that ‘the divorce between science’s Copernicanism and philosophy’s Ptolemaism has become abyssal, regardless of all those denials that serve only to perpetuate this schism’.741 If Kant is correct then his denial demonstrates that there is no genuine schism, abyssal or otherwise.

740 Allison, Kant’s Transcendental Deduction, 451.
741 AF, 128.
CHAPTER SEVEN:
KANT’S EMPIRICAL REALISM AND MEILLASSOUX’S TRANSCENDENTAL ILLUSION

We must project unreason into things themselves, and discover in our grasp of facticity the veritable intellectual intuition of the absolute. ‘Intuition’, because it is actually in what is that we discover a contingency with no limit other than itself; ‘intellectual’ because this contingency is neither visible nor perceptible in things and only thought is capable of accessing it.\(^{742}\)

The light dove, in free flight cutting through the air the resistance of which it feels, could get the idea that it could do even better in airless space. Likewise, Plato abandoned the world of the senses because it posed so many hindrances for the understanding, and dared to go beyond it on the wings of the ideas, in the empty space of pure understanding.\(^{743}\)

Empirical Realism

Kant’s empirical realism is the position that that which appears, construed as an object of possible experience and legitimate knowledge, is real. It is the central tenet of his transcendental idealism. On this view appearances are neither illusions nor unreal, and they are of no lesser degree of reality than things as they are in themselves. Indeed, Kant’s claim is that what it means for something to be real is relative to both epistemic and intuitive conditions. Here, I draw on the components of Kant’s idealism developed in the preceding chapters to clarify and defend these contentions against Meillassoux’s claim that knowing that which appears, that which is merely correlated with, or “for us” is to not know things as they really are. I shall argue that Meillassoux’s claim that the realisation of ‘thought’s absolutizing scope’ is not only possible but also necessary (to bridge the profound fissure separating science and philosophy) suggests both transcendental error and a fundamental misunderstanding of Kant’s empirical realism.

At the outset of the Transcendental Aesthetic Kant asks:

Now what are space and time? Are they actual entities? Are they only determinations or relations of things, yet ones that would pertain to them even if they were not

\(^{742}\) AF, 82
\(^{743}\) CPR, A5/B9, 129.
intuited, or are they relations that only attach to the form of intuition alone, and thus to the subjective constitution of our mind, without which these predicates could not be ascribed at all?\textsuperscript{744}

Following his argument that space and time cannot ‘be drawn from outer experience’, Kant rules out the traditional ontological conceptions of space and time; namely that they are either actual entities or substances; properties or determinations of things; or relations between things.\textsuperscript{745} Instead, he takes the fourth option – that space and time are ‘relations that only attach to the form of intuition alone’. Thus, with respect to space, he concludes:

Space represents no property at all of any things in themselves nor any relation of them to each other, i.e., no determination of them that attaches to objects themselves and that would remain even if one were to abstract from all subjective conditions of intuition … Space is nothing other than merely the form of all appearances of outer sense, i.e., the subjective condition of sensibility, under which alone outer intuition is possible for us. … we can accordingly only speak of space, extended beings, and so on, only from the human standpoint. If we depart from the subjective condition under which alone we can acquire outer intuition, namely that through which we may be affected by objects, then the representation of space signifies nothing at all.\textsuperscript{746}

This is Kant’s ideality thesis, according to which spatial and temporal predicates are limited to objects of possible sensibility, i.e., appearances. It is is equivalent to the claim that they are not predicates of things ‘when they are considered in themselves through reason, i.e., without taking account of the constitution of our sensibility’.\textsuperscript{747} This ideality, says Kant, is real: it is ‘objectively valid … of space in regard to everything that can come before us externally as an object … [It] assert[s] the empirical reality of space (with respect to all possible outer experience), though to be sure [also] its transcendental ideality, i.e., that it is nothing as soon as we leave the condition of the possibility of all experience, and take it as something that grounds the things in themselves.’\textsuperscript{748}

Thus, as the pure forms of our intuition, space and time are the form of empirical reality; the framework by which we apperceive the world. Kant explicitly contrasts transcendental idealism

\textsuperscript{744} CPR, A23/B37, 157.
\textsuperscript{745} Ibid., A23/B28, 174.
\textsuperscript{746} CPR, A26/B42, 176–177. Kant’s argument for time is largely similar, except that time is also the inner sense of intuition.
\textsuperscript{747} Ibid, A28/B44, 177.
\textsuperscript{748} Ibid.
with transcendental realism precisely because the latter treats space and time *ontologically* – either as things in themselves (i.e., substances), or as properties or conditions thereof:

I understand by the transcendental idealism of all appearances the doctrine that they are all together to be regarded as mere representations and not things in themselves, and accordingly that time and space are only sensible forms of our intuition, but not determinations given for themselves or conditions of objects as things in themselves. To this idealism is opposed transcendental realism, which regards space and time as something given in themselves (independent of our sensibility). The transcendental realist therefore represents outer appearances (if their reality is conceded) as things in themselves, which would exist independently of us and our sensibility and thus would also be outside us according to pure concepts of the understanding. It is really this transcendental realist who afterwards plays the empirical idealist; and after he has falsely presupposed about objects of the senses that if they are to exist they must have their existence in themselves even apart from sense, he finds that from this point of view all our representations of sense are insufficient to make their reality certain.\textsuperscript{749}

As we have seen, the trouble with the transcendentally realist position is that it engenders both dogmatism and scepticism. It is because she presupposes a transcendentally realist position that the empiricist, for whom the mind can have immediate access only to its own ideas or representations, is forced to concede that knowledge of the existence of external objects is problematic.

If we let outer objects count as things in themselves, then it is absolutely impossible to comprehend how we are to acquire cognition of their reality outside us, since we base this merely on the representation, which is in us. For one cannot have sensation outside oneself, but only in oneself, and the whole of self-consciousness therefore provides nothing other than merely our own determinations.\textsuperscript{750}

As Allison explains, for Kant ‘the form of transcendental realism that results in empirical or skeptical idealism is guilty of a kind of category mistake’ because it assumes that things that exist ‘independently of their relation to the conditions of human sensibility … retain their spatiotemporal properties and relations’. Thus, although empiricists (for whom external objects are not given but inferred) reason correctly when they conclude that the ‘human mind has no direct cognitive access to objects so considered’, on Kant’s view, that reasoning is predicated on a failure to note that it is *through* the forms of space and time that sensibility itself makes an

\textsuperscript{749} CPR, A369, 426.

\textsuperscript{750} Ibid., A378, 430.
a priori contribution to the cognition of what appears. And it is on account of this error that the empiricist tradition treats empirically external objects (objects in space and time) as transcendentally external, i.e., as things in themselves.

This same transcendentally realist presupposition underpins the rationalist tradition. According to Kant, whereas Locke ‘totally sensitivized the concepts of the understanding’, ‘Leibniz intellectualized the appearances’; he ‘compared the objects of senses with each other as things in general, merely in the understanding’. Consequently, he contends that for Leibniz space and time became the intelligible form of the connection of the things (substances and their states) in themselves … he conceded to sensibility no kind of intuition of its own, but rather sought everything in the understanding, even the empirical representation of objects, and left nothing for the senses but the contemptible occupation of confusing and upsetting the representations of the former.

Thus, for Kant, the cardinal error of transcendental realism – whether it sensitivises concepts or intellectualises appearances – is that, by presupposing that space and time and the objects therein are things in themselves, it conflates appearances (that which is given) with things in themselves (that which is independent of the conditions of our sensibility). In other words, it conflates empirical reality with transcendental reality. It is important to stress that Kant’s conception of transcendentalism, and thus what makes both transcendental idealism and transcendental realism transcendental in the first place, draws on both a traditional understanding of transcendental and Kant’s own conception. In the former sense, the notion of transcendental concerns ontology construed as that which pertains to being as such, or things in general. Thus, Kant writes ‘the use of space about all objects in general would also be called transcendental’. This reflects his characterisation of transcendental in the introduction to the first edition of the Critique: ‘I call all cognition transcendental that is occupied … with our a priori concepts of objects in general.’ In contrast, the latter sense of transcendental is

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752 CPR, A271/B327, 372.
753 Ibid., A276/B332, 374 – 375. Indeed, for Leibniz, ‘consideration of the nature of things’, that is, consideration of the essences of things, including the essential organisation of the universe, ‘is nothing but the knowledge of the nature of our mind and of those innate ideas, and there is no need to look for them outside oneself’ (1993, 85).
754 CPR, A56–57, 196.
755 Ibid., A11, 133. As Allison notes (2015, 22, n.4) Kant’s reference to ‘objects in general’ in both passages ‘suggests the Wolffian conception of the transcendental as concerned with the nature of objects in general or as
expressed in the passage from the second edition of the *Critique* that replaces this characterisation: ‘I call all cognition transcendental that is occupied … with our mode of cognition of objects insofar as this is possible *a priori***.756 Here, Kant is explicitly concerned with the *conditions* of the cognition of objects insofar as they are possible *a priori*, rather than our ‘*a priori* concepts of objects in general’. Thus, he advises his readers to ‘keep well in view … that not every *a priori* cognition must be called transcendental, but only that by means of which we cognize that and how certain representations (intuitions or concepts) are applied entirely *a priori*, or are possible (i.e., the possibility of cognition or its use *a priori*).’757

Combined, these two conceptions of transcendental inform a clearer understanding of Kant’s critique of transcendental realism as contrasted with transcendental idealism. Insofar as transcendental realism treats space and time as things in themselves, it treats them as transcendental in the former sense: as *a priori* conditions of things in general or objects as such. But the latter conception of transcendental emphasises that transcendental *cognition* concerns the ‘mode of cognition of objects insofar as this is possible *a priori*’. On this view, the mistake of transcendental realism stems from its assumption that we are in a position to cognise things in themselves, or things as such, *a priori*, which is itself a consequence of failing to draw an appropriate distinction between objects construed either as appearances or as things in themselves. In contrast, the argument of Kant’s *Critique* concerns a proof of the possibility of *a priori* cognition of objects, but only of objects conceived as appearances, that is to say, objects as they appear from a ‘human standpoint’ in a spatiotemporal manifold.

Conceived of in the latter sense – which concerns the *a priori* conditions of possible cognition – the error of transcendental realism is that it assumes that knowledge of the world and its objects ‘is to be measured and evaluated in terms of its conformity (or lack thereof) to the norm of a putatively perfect divine knowledge’, i.e., the God’s eye view.758 By contrast, Kant’s formal idealism – his Copernican revolution – shifts the ground of knowledge to a conformity or lack thereof with the norms of the sensible and intellectual conditions of *our* knowing. In

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756 CPR, B25, 133.
757 Ibid., A56/B80, 196.
this way Kant’s idealism combines the strengths of both empiricist scepticism (namely, that we are indeed incapable of a priori knowledge of things in themselves because the mind can have immediate access only to its own ideas or representations) and rationalist dogmatism (namely, that we are indeed capable of a priori knowledge of the world — but only considered as appearance) by tying both sensibility and the legitimate deployment of the understanding with respect to knowledge of the world to our forms of intuition and hence to appearances.

Consequently, Kant’s distinction between appearances and things in themselves concerns a distinction between the epistemological and intuitive conditions of their a priori cognitions. So understood, appearances concern objects construed in their relation to the conditions of our cognition, and things in themselves concern objects construed as they are outside these conditions. Crucially, as we have seen, the very notion of appearances is unintelligible without the notion of thing in themselves, since the former entails a grounds in something other than our forms of intuition and cognitive capacities because in the absence of such a ground appearances would in fact be things in themselves. As we have seen, Kant generates various determinations about objects considered as things in themselves from the contrast between objects considered in relation to the conditions of our cognition. This is why objects considered as things in themselves can be understood as non-spatiotemporal and also as the cause or ground of appearances. Of course, construed ontologically, i.e., as the super-sensible ground of appearances, things in themselves are indeed unknown and unknowable. Given that the epistemic-intuitive model of such knowledge is the God’s eye view, this is unsurprising. What, after all, would it be to know (or to experience) things as God might? Whatever sense we can make of the model of such knowledge (in its contrast to discursive knowing) we have no means of drawing ontological claims about thing as they are in themselves.

This scope restriction of our knowledge to the a priori conditions of the cognition of appearances also lies at the heart of Kant’s Transcendental Deduction where he contends that, while the categories pertain to objects in general, knowledge of objects requires sensibility. And, as we have seen, because sensibility itself requires, indeed entails, a form of intuition (e.g., space and time) the legitimate use of the categories with respect to knowledge of objects (whether a priori or empirical) is restrained by, or restricted to, that form and what appears therein. Correlatively, this scope restriction of the legitimate deployment of the categories with
respect to knowledge and experience of the world is itself premised on a scope restriction of sensibility to objects as they appear to us, i.e., according to our forms of intuition. For if sensibility were not so restricted and what appears (and its forms) were taken as things in themselves – as the transcendentally realist outlook tacitly assumes – then the scope of the categories would be wholly unrestricted.

Kant’s transcendental deduction aims to demonstrate that that which appears in a spatiotemporal manifold accords necessarily with the categories. He does this through an effort to prove that there is an a priori synthesis of space and time required for the representation of objects at a determinate time and as extended in space. Construed as the form of human intuition, unified space and unified time are simply given in sensation (even though they cannot be drawn from experience). But insofar as the representation of these unities requires synthesis, and since synthesis (i.e., unification or combination) ‘is an operation of the understanding … and cannot be borrowed from [objects] through perception’, their representation as objects (i.e., as conceptually determined) is a product of the understanding. More precisely, the representation of space and time as objects of intuition is an effect of the understanding on sensibility through the faculty of imagination. Now, given that Kant is clear that this synthesis of space and time (as formal intuitions) is not an effect of concepts (i.e., categories) there is a deep question of how exactly the understanding affects sensibility such that objects are given to us in space and time. Nonetheless, he maintains that both the prior synthesis of space and time required for intuition of sensible objects and the formal logic upon which the categories are based are grounded in the synthetic unity of apperception, which, he says, ‘is the understanding itself’. And this is why that which appears in space and time falls necessarily under the rules germane to the unification of concepts with respect to objects of sensible intuition, i.e., the categories. Thus, if Kant’s deduction is sound, he has demonstrated not only that space and time are both a product of the understanding and the very framework of sensibility within which objects appear to us, but also that empirical object are themselves – though not in themselves – governed necessarily by the categories. In other words, the deduction proves that space and time and the objects therein are transcendentally ideal and empirically

CPR, B135, 248.

Again, Kant characterises imagination as ‘the faculty for representing an object even without its presence in intuition’ (2005,B151, 256).

Again, the synthetic unity of apperception is required for the analytic unity of apperception.
real. To be clear, this is not to say that the objects of empirical reality are merely a product of the understanding; rather, it is to say that the understanding supplies the formal rules governing that which appears in a spatiotemporal manifold. Our minds do not produce the stuff or content of empirical reality, they supply both the form in which reality appears to us and the rules according to which appearances are governed. This is to be expected, since for Kant human experience and hence cognition of the world is discursive, i.e., it brings rules to bear on those objects that appear in a spatiotemporal manifold; it does not create the objects themselves, as a putatively divine intellect would.

Now, insofar as appearances, and hence empirical reality, are grounded in an unknowable super-sensible reality, this appears to licence the complaint that appearances miss something fundamental, something more real, a Great Outdoors that underpins appearances – things as they really are, as opposed to how they merely appear. But this conception – evident in so much of the critical commentary on Kant, not least in Meillassoux’s – is tied to transcendental realism insofar as it assumes that there is a way things really, or fundamentally are, i.e., a final fact of the matter. As intuitive – perhaps even unavoidable – as such a conception of reality is, on Allison’s interpretation Kant’s Copernican revolution is precisely an effort to demonstrate that this perspective is mistaken. Indeed, as we shall see shortly, it is part and parcel of transcendental illusion. For what it means for something to be ‘a fact of the matter’ depends on, and is relative to, a standpoint. Specifically, it is relative to rules whose application – with respect to cognition of objects – is restricted to a form of intuition, whether sensible or intellectual. So construed, Kant’s distinction between appearances and things in themselves is not an ontological distinction between a merely apparent world and a really real world; rather, as Allison puts it, it concerns two ‘distinct epistemic relations to objects, neither of which is ontologically privileged’. What it means, therefore, to say of something that it is real, as opposed to illusory or unreal, refers to an epistemic-intuitive framework underpinning both the nature of the evidence and the rules by which such claims derive their warrant. And this is why our empirical reality, grounded as it is on a spatiotemporal and categorial framework through which things appear to us, is not only real but is also neither more nor less real than that which might appear to another apperceiving rational being with a different form of intuition, or indeed to a pure understanding cognisant of things as they are in themselves.

This perspective not only has the advantage of making Kant’s conceptions of both transcendental idealism and empirical realism plausible (in contrast to the various phenomenalist and ontological interpretations) but it also allows us to identify the transcendentally realist underpinnings of Meillassoux’s argument. From the vantage-point of Kant’s critique of transcendental realism, it is clear that Meillassoux’s contention that ancestral statements produced by empirical science are incompatible with correlationist philosophies already treats space and (in particular) time as pertaining to, and therefore as, things in themselves. Indeed, his contention that the problem of the ancestral ‘cannot be thought from the transcendental viewpoint because it concerns the space-time in which transcendental subjects went from not-taking-place to taking-place and hence concerns the space-time anterior to spatiotemporal forms of representation’ treats space and time as a priori conditions of things in general, or being as such.  

Meillassoux’s claim that the Kantian outlook (according to which space and time depend on the existence of consciousness) is undermined by the requirement for the material conditions of human life to emerge from within a time anterior to, and hence un-correlated with, the existence of consciousness is based on a misunderstanding of Kant’s formal idealism. As Hallward rightly notes, neither knowledge of the time before (or after) human existence, nor knowledge of the requirement for human life to emerge in time and space in any way undermines Kant’s claim that the way in which we know the universe and its furniture is through a spatiotemporal form of intuition. Meillassoux does indeed conflate how we know with what we know, even if he recognises that what we know (i.e., our knowledge) is shaped by how we know. From the Kantian perspective developed here, the question of whether events have in fact occurred (or will in fact occur) in space and time in the absence of the existence of beings with spatiotemporal forms of intuition is straightforwardly answered. If by ‘in fact’ is meant the universe construed as it is in itself, as it might be from the perspective of God, then the answer is that we (could) have no idea. If by ‘in fact’ is meant according to a spatiotemporal framework then the evidence suggests an answer in the affirmative. Either way, Meillassoux’s contention that only the former constitutes knowledge of that which is ‘capable of existing whether we exist or not’ does not at all reflect the claims of Kant’s idealism.

763 AF, 26.
764 AF, 28.
Thus, insofar as Meillassoux’s argument is predicated on a purported incompatibility between ancestral claims (events in space and time that occurred prior to the existence of the material conditions necessary for the existence of consciousness) and correlationism (construed as the epistemological thesis that we can have no knowledge of things as they are not correlated with the existence of beings with our intuitive-epistemic framework) it rests on two related mistakes. The first is a transcendentally realist view that treats claims about space and time as claims about things in themselves; the second is the view that space and time are a function of the material existence of human beings, rather than a formal framework within which things appear for human beings. Indeed, for Kant, what it means for us to refer to the material existence of human beings is already to view them through an empirical realist lens, not least because ‘the understanding does not draw its (a priori) laws from nature, but prescribes them to it.’

From the Kantian perspective, Meillassoux’s contention that our knowledge of the ancestral evidences knowledge of the ‘the absolute’ – such that we must account for how thought is able to grasp it – is the transcendentally realist beginning of a series of transcendentally realist arguments premised on, and aimed at, both the extension of the categories of pure understanding beyond their legitimate scope, and the fulfilment of reason’s drive to reach an unconditioned condition – an ‘absolute’ which is mistakenly assumed to exist in the first place. The latter is the deception generated by what Kant refers to as transcendent illusion.

Before moving to that issue, however, it is worth recalling here that Kant’s conception of the relationship between sensation and the understanding, and between the understanding and reason, provide a framework upon which we can extend our knowledge of empirical reality far beyond the immediate evidence of our senses. This is not to say that Kant thinks that we either can or will come to know everything about the natural world and its laws. Nonetheless, Kant’s account of the ways in which our faculties of mind work on the material available to our senses suggests that we are endowed with a robust and highly flexible toolkit for the

765 Kant, Prolegomena to Any Future Metaphysics, §36, 72.
766 Since, although empirical (or natural) laws ‘stand under the categories [they] cannot be completely derived’ from them (2005 B165, 264). Two important consequences follow: first, in order to come to know empirical laws we require evidence from the senses; second, there is no guarantee that we will come to know nature’s workings. Indeed, as I noted on page 231 (n717) in the third critique Kant concedes that ‘the specific diversity of the empirical laws of nature together with their effects could … be so great that it would be impossible for our understanding to discover in them an order we can grasp … [one] not fitted for our power of comprehension’ (2000, 5:185, 72).
systematic enquiry into nature and its laws. In short, Kant’s account of knowledge production entails the following process. First, sensory material pre-ordered in space and time is brought to the unity of apperception via the categories (i.e., the understanding) in the production of judgments. Next, these judgments are unified and integrated by reason. Reason’s drive to unify, integrate and organise knowledge via its regulative ideas (the ‘transcendental presuppositions’ of homogeneity, variety and affinity) is not only essential for the generation and integration of empirical judgments, but it also compels us to find order in nature and to systematise the empirical and theoretical knowledge thereof. When combined, sensation, the understanding and reason, underpinned by the empirical reality of a spatiotemporal manifold and the objects therein, provide an integrated framework for the systematic investigation of nature and the extension of our knowledge far beyond what is immediately available to the senses and the material existence of human beings. Consequently I see no reason to suppose that the knowledge generated by the empirical sciences – whether it concerns anterior or posterior events or causal laws pertaining to matter, energy, or entropy – obviously comes into conflict with transcendental idealism.

Transcendental Illusion

I have repeatedly noted that Meillassoux’s argument bears the hallmarks of what Kant identifies as forms of transcendental error and illusion, in particular because it consists in both a failure to restrict the understanding to its legitimate field of application and an effort to satisfy reason’s demand to find an unconditioned condition. In order finally to defend this contention, I must first clarify Kant’s conceptions of transcendental error and transcendental illusion and their relationship.

In his preliminary discussion of transcendental illusion Kant claims that ‘error is effected only through the unnoticed influence of sensibility on understanding’. Such error is evident in the transcendental employment of the categories, that is, the illicit extension of the categories beyond their legitimate scope. As we have seen, for Kant, Locke’s error of ‘sensitivizing the concepts of the understanding’ is founded on the assumption that the conditions of our sensibility are also conditions of things as such, rather than merely conditions of things as

767 CPR, A294/B351, 385.
objects of possible experience. This is the extension of the legitimate field of application of the categories from objects of possible experience to things in themselves. In contrast, Leibniz’s error of ‘intellectualiz[ing] the appearances’ i.e., his construction of ‘an intellectual system of the world … [by which he believed he was] able to cognize the inner constitution of things by comparing all objects to the understanding and the abstract formal concepts of its thinking’ is based on a failure to notice that sensibility is itself a ‘source of the realizing conditions of the understanding’, as Allison puts it.\(^6\) In other words, this is the extension of categorial cognition under the assumption that sensibility is not a genuine condition of cognition. Both ontological systems thus entail the illicit extension of the categories beyond their legitimate field of application; both fail to note, albeit in opposite ways, the ‘influence of sensibility on understanding’. Kant refers to this ontological error as a form of ‘dialectical illusion’ and he contends that the goal of the Analytic (principally the Deduction) is to address this illusion by establishing the boundaries of the understanding with respect to knowledge of the world.\(^7\)

Because Kant’s critique of this error is grounded in his discursivity thesis (the contention that human cognition of the world – and hence our possible \textit{a priori} knowledge thereof – requires both sensibility and the understanding) his therapeutic treatment is transcendental reflection, i.e., the consideration of objects – as both appearances and things in themselves – in relation to the logically contrasting epistemic and intuitive conditions of their \textit{a priori} cognition.\(^8\)

However, such a remedy does not apply to the related illusion to which we now turn. Although transcendental illusion is also the result of the ‘unnoticed influence of sensibility on understanding’ it cuts deeper than the problems addressed in the critique of ontological error developed in the Analytic, for it concerns principles proper to reason itself.


\(^7\) CPR, A63/B88, 200. Kant writes:

\[\text{[B]ecause it is very enticing and seductive to make use these pure cognitions of the understanding and principles by themselves, and even beyond the bounds of experience, which however itself alone can give us the matter (objects) to which those pure concepts of the understanding can be applied, the understanding falls into the danger of making material use of the merely formal principles of pure understanding through empty sophistries, and of judging without distinction about objects that are not given to us, which perhaps indeed could not be given to us in any way.}\]

In this way, we fail to see that the understanding is a ‘canon for the assessment of empirical use … [not an] organon of a general and unrestricted use’ (2005, A63/B88, 199–200).

\(^8\) Kant introduces the notion of transcendental reflection at A261/B317 (367) and characterises it as ‘a duty from which no one can escape if he would judge anything about things \textit{a priori}’ (CPR, A263/B319, 368).
According to Kant, the very same demands of reason that guide our rational scientific enquiry lead us unavoidably to transcendental illusion, the cause of which is that in our reason (considered subjectively as a human faculty of cognition) there lie fundamental rules and maxims for its use, which look entirely like objective principles, and through them it comes about that the subjective necessity of a certain connection of our concepts on behalf of the understanding is taken for an objective necessity, the determination of things in themselves.\footnote{CPR, A297/B353, 386.}

In short, Kant’s claim is that the particular nature of reason is such that it takes its own principles and interests to be objectively necessary in relation to things in themselves. And it is this propensity, he argues, that both paves the way for a particular branch of metaphysics concerning transcendent objects and ‘incite[s] us to tear down all those boundary posts [of the Analytic] and to lay claim to a wholly new territory that recognizes no demarcations anywhere’.\footnote{Ibid., A296/B352, 385. The boundary posts in question are those established in the Transcendental Analytic, namely, the scope restriction of the categories to sensibility that stand against the attempt to acquire knowledge of things in themselves, i.e., objects in general.} As previously noted, the roots of these propensities lie in the fact that ‘the proper principle of reason in general (in its logical use) is to find the unconditioned condition for conditioned cognitions of the understanding, with which its unity will be completed’.\footnote{Ibid., A307/B364, 391. As Allison notes (2004, 329) it is this drive, inherent in the formal business of reason, that separates the distinctive characteristics of ontological transcendental error and transcendental illusion – whereas ‘judgmental error arises from a mistaken use of principles which in their own sphere are perfectly legitimate’, the illusion generated by reason ‘stems from the very principles involved’.}

Crucially, Kant contends that this ‘logical maxim cannot become a principle of pure reason unless we assume that when the conditioned is given, then so is the whole series of conditions subordinated one to the other, which is itself unconditioned, is also given’.\footnote{Ibid., A308/B364, 392.} In other words, the very demand to find the unconditioned assumes, as a metaphysical principle, that it is there to be found in the first place.\footnote{Ibid., A308/B364, 392.} And it is this supposition, argues Kant, which forms the background assumption upon which rest metaphysical claims about God, the Soul and the ultimate grounds of the universe. To be clear, Kant is not advocating that we attempt to cure reason of this illusion by removing its dependence on the supposition that the unconditioned exists. Not only is this supposition unavoidable, since it is part and parcel of reason’s...
condition-hunting (it is, he says ‘the supreme principle of pure reason’), but it is also the very life-blood of rational enquiry.\textsuperscript{776} It is, nonetheless, the source of error because the unconditioned posited by the principle of reason cannot be met with in any possible experience. And this is why, as Grier explains, ‘Kant identifies metaphysics with an effort to acquire knowledge of “objects” conceived, but in no wise given (or giveable) to us in experience.’ She continues, ‘[i]n its efforts to bring knowledge to completion … reason posits certain ideas, the “soul,” the “world” and “God” … [e]ach of [which] represents reason’s efforts to think the unconditioned in relation to various sets of objects that are experienced by us as conditioned.’\textsuperscript{777} The problem, in short, is that we are deceived by the illusion that there is an unconditioned condition generated by reason’s injunction to ‘never stop seeking conditions until one gets them all; [to] never rest satisfied with an explanation that leaves something unexplained’.\textsuperscript{778}

According to Kant, even if we cannot avoid the illusion, the means by which we avoid its \textit{deception} is through the self-discipline of reason.\textsuperscript{779} And at the heart of this self-discipline is Kant’s contention that reason’s proper use is regulative, not constitutive. As we have already seen, in its regulative use, reason works on the material of the understanding. It directs the understanding towards unity and completeness. Indeed, in this connection even the ideas of metaphysical objects that reason propels the understanding to postulate have use as regulative functions; for such ideas help orientate our world-view and our epistemic projects. However, when reason is treated as constitutive, we are deceived into thinking that the objects we postulate to satisfy reason’s demands to find an unconditioned refer to real objects. Kant’s point is that the ideas reason compels the understanding to postulate do not provide us with concepts of objects that we could ever come to know. Thus, in its constitutive use, ‘[c]ontrary to all the warnings of criticism [reason] carries us away beyond the empirical use of the

\textsuperscript{776}\textit{CPR}, A308/B365, 392. Of reason’s role in all our cognitive activities Kant writes, ‘the law of reason to seek unity is necessary, since without it we have no reason, and without that, no coherent use of the understanding, and, lacking that, no sufficient mark of empirical truth … we simply have to presuppose the systematic unity of nature as objectively valid and necessary’ (A651/B679, 595).


\textsuperscript{778}Allison, \textit{Kant's Transcendental Idealism}, 331.

\textsuperscript{779}Allison (2004, 329) provides a usefully obvious metaphor to illustrate the difference between avoiding the illusion and its deceiving us: we cannot avoid the illusion that a stick in water appears bent but we \textit{can} avoid the deception that this generates.
categories, and holds out for the semblance of extending the pure understanding. In the deception of transcendental illusion we are led by the principles and presuppositions of reason to work over the products of the understanding without recognising the scope restriction of the understanding entailed by sensibility; we fail to note the ‘influence of sensibility on understanding’.

Underlying Kant’s assessment of transcendental illusion and his treatment of its deception in the Antinomies is his critique of transcendental realism and, correlatively, his defence of transcendental idealism. The point of the Antinomies chapter is to demonstrate that when the world and the objects therein are treated as things in themselves reason drives the understanding into irresolvable conflict. Thus, following the principles of reason,

If the condition as well as its conditions are things in themselves, then when the first is given not only is regress to the second given as a problem, but the latter is thereby really already given along with it; and, because this holds for all members of the series, then the complete series of conditions, and hence the unconditioned is thereby simultaneously given, or rather presupposed by the fact that the conditioned, which is possible only through that series, is given.

Kant explains that ‘[h]ere the synthesis of the conditioned with its condition is a synthesis of the mere understanding, which represents things as they are without paying attention to whether and how we might achieve acquaintance with them’. His point, as Allison explains, is that from a transcendentally realist perspective – i.e., one that treats objects of experience as things in themselves – the way in which the understanding synthesises the conditioned with its

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780 CPR, A295/B352, 385.
781 This is clearly encapsulated in Kant’s formulation of the difference between reason and the understanding in the *Critique of Judgment*: ‘Reason is a faculty of principles, and in its most extreme demand it reaches to the unconditioned, while understanding, in contrast, is always at its service only under a certain condition, which must be given’ (2002, §76, 271).
782 For example, in the first Antinomy Kant notes that it is an objectively valid principle of the understanding and of possible experience that any event in nature, given to us at some point in time must be conceived as having followed upon some preceding moment in time. As this condition applies to each moment in time, the principle of reason demands an explanation to account for the first moment. Thus reason drives us to suppose that the world has a beginning in time. However, if we suppose that the world has a beginning, and concede that this ‘beginning is an existence preceded in time’ then we are driven to the view that there was ‘a time in which the world was not, i.e., an empty time’. But, says Kant, in an empty time ‘no arising of any sort of thing is possible … because no part of such a time has … any distinguishing conditions of existence rather than its non-existence’. Thus, we are compelled to conclude that ‘many series of things may begin in the world, but the world itself cannot have a beginning, and so in past time it is infinite’ (2005, A426–427/B454–455, 470–471).
783 CPR, A498/B526, 515.
784 Ibid.
condition ‘involves a pure or transcendental use of the categories, which, by abstracting from the sensible conditions of their application ... yields merely rules for thought of “objects in general”’. In other words, abstracted from sensible conditions, the mere thought of the existence of a conditioned object entails that the unconditioned condition, or totality of conditions, of that object must also exist. Thus the transcendentally realist outlook must assume that the conditions we are impelled to hunt down by reason are not only ‘given as a problem’ or as a task, but also that they do in fact exist. In contrast, transcendental idealism – which, says Kant, is ‘the key to solving the cosmological dialectic’ – need not assume that sought after conditions are in fact there to be found. By viewing objects of experience as appearances, transcendental idealism has the means of separating reason’s task of hunting down conditions from its assumption that the whole series of conditions are themselves given. This can be seen in the first antinomy. On the assumption that the whole series of conditions is given, we conclude both that there must have been an ‘empty time’ before the world came into existence (to account for the first moment of time in the series of moments) and that this would preclude the world coming into existence (because the world cannot come into existence from an empty time). If, however, the task of seeking out conditions is restricted to spatiotemporal objects considered as appearances, transcendental idealism cannot concede that the conditions of the entire series are in fact given, since, construed as appearances (i.e., as part of empirical reality) objects are incompatible with an empty time. In this way, transcendental idealism has a means by which to loosen the grip of transcendental illusion by denying reason’s principle that the conditions, and the whole series of conditions, are themselves given. Thus, as Allison explains, ‘[t]ranscendental idealism not only allows for but requires precisely what transcendental realism seems forced to deny, namely, a principled distinction between a condition being given and its search merely set as a task.’ Consequently, however “natural” it remains for the transcendental idealist to think of the series of conditions as given, she is

785 Allison, *Kant’s Transcendental Idealism*, 386.
786 CPR, A490/B518, 511.
787 CPR, A426–427/B454–455, 470–471
788 Ibid., 386. At A499/B527 (515) Kant writes:

[If] I am dealing with appearances, which as mere representations are not given at all if I do not achieve acquaintance with them (i.e., to them themselves, for they are nothing except empirical cognitions) then I cannot say with the same meaning that if the conditioned is given, then all the conditions (as appearances) for it are also given; and hence I can by no means infer the totality of the series of these conditions. For the appearances, in their apprehension, are themselves nothing other than an empirical synthesis (in space and time) and thus are given only in this synthesis.
‘equipped with a critical tool, making it possible to resist being seduced by this way of thinking’. \(^{789}\) Indeed, it is this tool that allows transcendental idealism to dissolve the antinomies. In the case of the first antinomy, the transcendental idealist (in contrast to the transcendental realist) can maintain that both thesis (the world has a beginning in time) and antithesis (the world has no beginning) are false because both presuppose that the world is given as a thing in itself. Indeed, since transcendental idealism provides the only key to the solution of this antinomy, Kant argues that we either accept it or fall victim to the ‘euthanasia of pure reason’. \(^{790}\) In sum, the transcendental illusion generated by reason’s presupposition that the conditions for which it seeks are given, need deceive us, and bring reason into conflict with itself, only if we assume a transcendentally realist perspective.

Thus, ontological transcendental error and transcendental illusion both entail a failure to note the ‘influence of sensibility on understanding’. In the former case, the failure concerns an extension of the categories beyond their legitimate field of application by either sensitivising concepts or intellectualising appearances; whereas in the latter the failure concerns the ‘extension from the conditioned objects of the understanding to the unconditioned objects of reason’. \(^{791}\) In that case, reason’s operative assumption that the conditioned is given generates an unavoidable deception if it is assumed that sensibility does not exert an influence on the understanding, i.e., we treat objects as things in general or as being as such. Transcendental idealism and Kant’s critique of reason function as the means by which we might avoid these illusions, and the dogmatism, scepticism and antinomies to which they give rise.

There is of course far more to be said about transcendental illusion in relation to the antinomies, reason’s self-discipline and the virtues of transcendental idealism over transcendental realism. Nonetheless, we now have a clearer vantage point from which both to identify the extent to which Meillassoux’s argument engages in transcendental error and transcendental illusion and to determine the difficulties to which this gives rise.

Insofar as Meillassoux’s argument consists largely in the generation of claims about “the absolute”, putatively on the basis of the ‘luminous clarity of intellection’, it is characterised by

\(^{789}\) Allison, Kant’s Transcendental Idealism, 386.

\(^{790}\) CPR, A407/B434, 460.

\(^{791}\) Allison, Kant’s Transcendental Idealism, 326.
transcendental error.\textsuperscript{792} His ‘intellectualizing of appearances’ in the construction of ‘an intellectual system of the world’ is evident throughout. Indeed his central aim of proving that mathematical discourse provides access to being as such is explicitly predicated on the view that sensibility is not a genuine condition of cognition. Meillassoux’s central doctrines – the principle of unreason, the necessity of everything’s non-necessity, the ontological conception of hyper-Chaos, the derivation of the figures of facticity and his deployment of Cantor’s theory of infinities – all exhibit the same presupposition. Indeed, he is quite clear about this:

We must project unreason into the thing itself, and discover in our grasp of facticity the veritable intellectual intuition of the absolute. ‘Intuition’, since it is well and truly in what is that we discover a contingency with no bounds other than itself; ‘intellectual’, since this contingency is nothing visible, nothing perceptible in the thing; only thought can access it.\textsuperscript{793}

Nonetheless, perhaps the most striking example of ontological transcendental error in Meillassoux’s argument comes from the empiricist side. It will be recalled that the central argument for his contention that ancestral statements must be conceived as statements about reality as it is in itself (and not as it is correlated with or “for us”) is that ancestral time is a logical condition of the possible coming into existence of the material requirements for ‘the taking place of the transcendental’.\textsuperscript{794} Consequently, Meillassoux contends that the coming into existence of human beings, and hence the incarnation of the transcendental subject that brings its forms of intuition and cognitive faculties to bear on the universe, is itself a function of a non-correlational space-time that cannot be conceived as a correlate of our consciousness. Leaving aside the various problems already identified with this argument, what is here important is that, insofar as the space-time of the ancestral (the so-called diachronic) constitutes a foundational plank of Meillassoux’s argument, a sensitivisation of the understanding is part of the ontological mix. Not only does his argument treat ancestral time (and space) as things in themselves, but insofar as it regards the material conditions and coming into existence of material bodies as logically necessary for the possibility of the existence of consciousness, it also treats material objects as things in themselves. Thus, from a Kantian perspective, Meillassoux’s argument begins from a clear – though in this case

\textsuperscript{792} AF, 91.
\textsuperscript{793} AF, 111.
\textsuperscript{794} AF, 24.
disavowed – assumption that the conditions of our sensibility are also conditions of things as such.

Of course, for Meillassoux the ancestral argument does not at all suffice to undermine correlationism. That requires first establishing an unimpeachable, because non-dogmatic, conception of the absolute that not only serves as the basis upon which to underwrite the absolute truth of ancestral statements but also that stands up to the most robust correlationist challenge. Meillassoux’s first absolute, then, is the principle of unreason which he proposes on the basis of his contention that the failure of the ontological argument demolishes both the PSR and causal necessity. Ignoring here the defects of that argument it is important to note that it is predicated on the view that the legitimacy of the PSR depends on the supposition of the existence of a final, or unconditioned, condition. On Kant’s account, reason’s demands for an unconditioned do indeed find their resting place in the idea of God. In this respect, Meillassoux is right to contend that it is the PSR that drives thought towards the determination of an ultimate reason that will account for all other reasons. As we have seen, from Kant’s point of view the error of the ontological argument (in Descartes’ version at least) is that the real existence of God cannot follow from the mere concept of God. For Kant, the trouble with any such proof is that the understanding is in no position to identify an object that might answer to that concept, because the logical concept of God is not one to which the categories might be used in a determinate way. Indeed, it is here that the real difference between Kant’s critique of reason and Meillassoux’s critique of correlationism is made clear.

795 In other words, the ontological argument entails a misemployment of the category of existence precisely because we are dealing only with an object of pure thought, and hence one whose existence cannot be known.

796 Kant (1998, A584/B612, 559–560) explains the problem this way:

In spite of its urgent need to presuppose something that the understanding could take as the complete ground for the thoroughgoing determination of its concepts, reason notices the ideal and merely fictive character of such a presupposition much too easily to allow itself to be persuaded by this alone … to assume a mere creature of its own thinking to be an actual being, were it not urged from another source to seek somewhere for a resting place in the regress from the conditioned, which is given, to the unconditioned, which in itself and as regards its mere concept is not indeed actually given, but which alone can complete series of conditions carried out to their grounds.
For it seems that Meillassoux’s argument rests on this very deception. To see why, let us turn briefly to his account of the implications of the critique of the ontological argument. His argument can be reconstructed as follows:

- The existence of a necessary being cannot be proved.
- If there is no necessary being then there is no final reason (i.e., final condition or unconditioned).
- If there is no final reason (or final condition or unconditioned) then the PSR (i.e., reason’s condition-hunting) falls foul of an infinite regress: The PSR and an infinite regress are incompatible.
- Hence, if there is no final reason (or final condition) the PSR is false.
- If the PSR is false there is no reason (or condition) that would account for (i.e., necessitate) the existence of some object or state of affairs.

Meillassoux’s refutation of the PSR is tied to the view that it can be legitimised only on the supposition that there is a final condition that accounts for all other conditions (i.e., a final reason). Consequently, if it is shown that no such condition actually does or could exist then we are entitled to reject the PSR. Now, I take it that from Kant’s perspective this inference would be compelling – but only if we assume a transcendentally realist position in the first place. From a transcendentally realist viewpoint the conclusion that there is no final or unconditioned condition would indeed undermine the view that everything conditioned has a condition. That is to say, we can go from the precept that if the given is conditioned then the whole series of conditioned and the unconditioned is also given to the conclusion that if the unconditioned is not given – because it does not or could not exist – then neither is that which it conditions. In other words, Meillassoux inverts the relationship between the PSR and the ontological argument. He draws the conclusion that, in the absence of a final or unconditioned condition, there are no conditions for objects or states of affair from the presupposition that the existence of conditions does indeed entail the existence of a final or unconditioned condition. This, however, puts him in the unfortunate position of trying to provide a condition for the unconditioned (un)condition of all things.
By contrast, if we adopt the transcendentally idealist position then we have a means of denying reason’s principle that there is an unconditioned condition. Instead, we take condition-hunting as a task, on the basis of the restriction of our possible knowledge to objects as they appear. Thus, it seems that Meillassoux’s rejection of the PSR, of reason’s demand to find an explanation for things, is predicated on the very fact that a transcendentally realist outlook cannot avoid the deception – the supposition of the actual existence of a final or unconditioned condition – generated by reason’s transcendental illusion. Indeed, it is this transcendentally realist outlook, itself motivated by the view that ancestral statements just are knowledge of things in themselves, that underpins Meillassoux’s endeavour to find an absolute. But if Kant is right, then Meillassoux’s considerable efforts to immunise his search from dogmatism by avoiding the postulation of a necessary entity is bound to fail, since the only way to fulfil reason’s demand to hunt down the unconditioned is to believe that it exists in the first place. Thus, despite his critique of the PSR, it is unsurprising that Meillassoux’s avowedly rationalist argument is characterised by both the postulation of an unconditioned conditioning logical structure – hyper-Chaos – that might account for the necessary contingency or facticity of all things and an effort to demonstrate that its non-existence would be a contradiction.

Following Kant, one way to determine the errors in such an approach would be to identify the contradictions to which it gives rise. As Sergey Sistiaga remarks, contradictions are a characteristic feature of Meillassoux’s argument:

On several occasions Meillassoux denies the premise, which as in the case of correlationism is indispensible for his argument, in the conclusion of his argument. He argues for the truth of correlationism to its falsity, from dualism to monism, from the non-absolute to the absolute of the non-All... In all cases his conclusions contradict their premises. Indeed, trying to convert correlationist dualism into an absolute monism of unreason may well be an impossible task, as the absolute cannot by definition be fundamentally divided in itself.

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797 Which is why Kant’s version of the PSR is causation.
798 And given the supposition that ancestral statements correctly inform us of things in themselves this approach makes good sense, at least on the basis of Kant’s assessment of transcendental realism.
799 Indeed, Meillassoux’s approach recalls Hegel’s contention that the ‘idea of the absolute identity of thought and being is the very one which the ontological proof and all true philosophy recognize as the sole and primary Idea as well as the only true and philosophical one’ (1977, 94.)
To this list we might add the fact that Meillassoux contends that ancestral time is chronological and that the world in-itself must be governed by the same laws that make consciousness possible, but also that none of this might actually be the case, because hyper-Chaos is capable of anything. Perhaps these claims are compatible. However, even if we factor in the inviolability of the PNC, Meillassoux’s conception of hyper-Chaos is clearly compatible with entirely unfathomable realities. Either way, from the Kantian perspective it is plain that Meillassoux’s commitment to both the ontological reality of the mathematisable properties of empirical objects and the grand metaphysical reality of hyper-Chaos are marked by both transcendental error and the delusions generated by the assumption that we can know an already given unconditioned.

Finally, it is important to mark the distinction between Meillassoux’s and Kant’s respective conceptions of intellectual intuition. As we have seen, Kant opposes human discursive cognition to intellectual intuition. As discursive cognisers we require both concepts and sensible intuition to experience and to know the universe. Without the former there would be no thought, and therefore no cognition of the world; without the latter there would be nothing to be thought about (and therefore no cognition of the world). The central contention of the Critique is that transcendental idealism provides the only plausible vantage point from which to account for the cognitive fit between what appears and the rules germane to the understanding. In contrast, the intuition of an infinite, non-discursive (i.e., non-sensible) cogniser would be purely intellectual and creative. Thus, a purely intellectual intuition would create content directly from its mind, which is why such a being would indeed achieve direct and complete acquaintance with things as they are in themselves. Insofar as this model of cognition makes sense, whatever “appears”

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801 As Allison explains: ‘The crucial point is that for Kant the original orderability of the objects of sensibility as well as the actual ordering, is a contribution of the cognitive subject’ (2004, 14). If, on the other hand, sensibility did not have any a priori forms, there would be no room for an objective ordering of states and events as distinct from a subjective ordering of perceptions. Either the two orders [i.e., the rules of the understanding and sensible intuition] would simply coincide, which amounts to phenomenalism, or there would be no way, short of metaphysical assumptions, such as a pre-established harmony, for getting from the one to the other, which leads either to skepticism or to an ungrounded dogmatism. (2004, 17)

802 Allison, Kant’s Transcendental Idealism, 14.
to such a purely intellectual intuition would be entirely unmediated by representation because it would be nothing other than the content of its mind. Consequently, there would be no external world for such a being – its mind and the world it intuits would be identical. Meillassoux registers something of this in his discussion of a ‘subject with out any point of view’, one with ‘access to the world as a totality, without anything escaping from its instantaneous inspection of objective reality’. For such a subject, he says, the world would be ‘the transparent object of an immediately achieved and effective knowledge … [without] sensible receptivity and its spatio-temporal form’. This is indeed the God’s-eye view characteristic of the theocentric model of knowledge. As we have seen, Meillassoux makes a considerable effort to immunise his ‘intellectual intuition of the absolute’ from the dogmatism characteristic of rationalist metaphysics by rejecting both the ontological argument and the PSR, and thus, he says, the grounds upon which a necessary entity might be posited. Indeed, Meillassoux’s intellectual intuition posits the absence of necessity as a necessity. However, as noted previously, Kant thinks that avoiding dogmatism requires a more fundamental commitment, namely ‘an antecedent critique’ of the very capacities of the understanding and of reason. Now, perhaps Meillassoux’s confrontation with correlationism is intended to fulfil this criterion by tackling what he sees as the most robust philosophical barriers to intellectual intuition of ‘the absolute’. Nonetheless, insofar as that confrontation is predicated on a seriously limited engagement with Kant’s argument, it is perhaps unsurprising that Meillassoux’s version of intellectual intuition fails to reflect Kant’s assessment of its epistemological implications; that intellectual intuition – insofar as it makes any sense to us – entails the unrestricted scope of the understanding. Because the categories are concepts of objects as such, in the absence of their critical restriction to appearances we are indeed given to suppose that they pertain to ‘Being’ or “the absolute” or some Great In-itself. Thus, from

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803 In the *Critique of Judgment* (2000, §76, 5:403, 272–273), Kant refers to some of the characteristic differences between a discursive intellect and purely intuitive intellect:

I cannot presuppose that in every such being thinking and intuiting, hence the possibility and actuality of things, are two different conditions for the exercise of its cognitive faculties. For an understanding to which this distinction did not apply, all objects that I cognize would be (exist), and the possibility of some that did not exist, i.e., their contingency if they did exist, as well as the necessity that is to be distinguished from that, would not enter into the representation of such a being at all.

804 AF, 24.

805 Again, for Kant, dogmatism is characterised by ‘the presumption of getting on solely with pure cognition from (philosophical) concepts according to principles … without first inquiring in what way and by what right it has obtained them. Dogmatism is therefore the dogmatic procedure of pure reason, without an antecedent critique of its own capacity.’ (2005, Bxxxv, 119).
Kant’s point of view, if we suppose that we do have knowledge of things in themselves – as Meillassoux’s ancestral argument purportedly demonstrates – there is a powerful philosophical drive to intellectualise appearances. When combined with reason’s demand to find an unconditioned condition, this transcendental ontological error produces a fertile ground for speculative metaphysics, not to mention dogmatism and antinomy.

In short, for all his laudable efforts and ingenious strategies to avoid dogmatism, from the Kantian perspective at least, Meillassoux’s argument bears its hallmarks from the start. Nor does he give us convincing grounds on which to suppose that perspective mistaken.
CONCLUSION: SPECULATIVE GUILT

Kant is the inventor of the disastrous theme of our “finitude”. The solemn and sanctimonious declaration that we can have no knowledge of this or that always foreshadows some obscure devotion to the Master of the unknowable ... To render impracticable all of Plato’s shining promises – this was the task of the obsessive from Königsberg, our first professor. Nevertheless, once he broaches some particular question, you are unfailingly obliged, if this question preoccupies you, to pass through him. His relentlessness – that of a spider of the categories – is so great, his delimitation of notions so consistent, his conviction, albeit mediocre, so violent, that, whether you like it or not, you will have to run his gauntlet... I pay my tribute here to Kant’s philosophical sadism. In vain I seek to draw this quibbling supervisor, always threatening you with detention, the authorization to platonize. 806

That the human mind would someday entirely give up metaphysical investigations is just as little to be expected, as that we would someday gladly stop all breathing so as never to take in impure air. 807

The ‘injunction to know the absolute’, to clamber out from the shadows into the luminous clarity of the Great Outdoors, is not simply a foundational trope of the tradition of Western philosophy. The correlationist orientation of much of the contemporary philosophical landscape is not only often radically out of step with the natural and mathematical sciences, but its ruthless critique of reason is an important, albeit paradoxical, component of the rise of an explicitly anti-rationalist, putatively post-metaphysical fideism. When Meillassoux complains that ‘the end of metaphysics has taken the form of an exacerbated return of the religious’ his principal target is the ‘theological turn’ in phenomenology. 808 Less dramatically, the sceptical critique of foundations and absolutes, of truth and knowledge, and of reason itself are indeed part of the unintended legacy of Kant’s critical revolution. Meillassoux may be right that the critique of reason’s vaulting ambitions sowed the very seeds of both a fundamental schism between science and philosophy, and the philosophical justifications for contemporary forms of fideism – as if we had convinced ourselves to retreat underground and to embrace a blind faith in a

807 Kant, Prolegomena to Any Future Metaphysics, 4:367, 118.
808 AF, 45. The ‘religionizing of reason’ is the paradoxical consequence of ‘leaving the realm of metaphysics ... the absolute seems to have been fragmented into a multiplicity of beliefs that have become indifferent, all of them equally legitimate from the viewpoint of knowledge, and this simply by virtue of the fact that they themselves claim to be nothing but beliefs’ (AF, 47).
hidden necessity behind the scenes. Nonetheless, I have demonstrated that very little of this bears a relation to the real import of Kant’s idealism.

Meillassoux’s response to the destruction wrought in the wake of Kant’s revolution consists in an effort to clarify and sharpen the arguments grounding the critique of metaphysics in an attempt to establish a non-dogmatic route to ‘absolute knowing’ that might withstand these arguments. Indeed, Meillassoux’s goal is nothing less than a grand non-metaphysical union of thought and being. The great novelty of his argument is its immanent approach. In short, he argues that the sceptical force of correlationist critique derives its legitimacy from a tacit commitment to the necessity of contingency. More precisely, he attempts to prove that the most powerful critical weapon of correlationism – the correlationist circle – leads to a choice between two absolutes: absolute idealism or absolute contingency. The former entails the absolutisation of the correlate, and the latter entails the absolutisation of the tacit principle upon which the circle argument rests, namely facticity. Absolute idealism is ruled out because it entails a necessary entity and facticity is shown to presuppose the necessity of everything’s contingency. Rendered ontological, the necessity of everything’s contingency becomes the fundamental logical structure of the universe; a rational chaos in which anything at all is possible, save the existence of contradictory entities or of nothing at all. There is no hidden reason behind appearances, no fundamental truth inaccessible to mere finite beings. Instead, we can deduce – from the comfort of our armchairs – that the ultimate structure of the universe, Being as such, just is the absence of reason.

Meillassoux’s argument is striking in its novelty, stunning in its ambition, vast in its philosophical scope, deft and ingenious in its execution, and, unfortunately, almost entirely unconvincing. Although superficially persuasive and apparently rigorously developed, under close scrutiny Meillassoux’s key arguments fail, even when their premises are conceded. Giraud’s and Millière’s critique reveals the most serious immanent error. Their proof that strong correlationism is under no logical obligation to concede that, necessarily, everything is

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809 For Meillassoux, the imperative to transform strong correlationism into speculative materialism is significantly motivated by the irrationality sanctioned by the former: ‘Against dogmatism, it is important that we uphold the refusal of every metaphysical absolute, but against the reasoned violence of various fanaticisms, it is important that we re-discover in thought a modicum of absoluteness – enough of it, in any case, to counter the pretensions of those who would present themselves as its privileged trustees, solely by virtue of some revelation’ (2008,49).

810 Paul Ennis (2011, 49) aptly characterises Meillassoux’s argument as ‘Hegel with Hope’.
contingent is an unambiguous refutation of Meillassoux’s central argument. Two further issues stand out. The first, \textit{contra} Giraud and Millière, is that the ostensibly indefeasible correlationist circle argument is specious. Stove was not the first to point this out. Indeed, it is just as well that Kant does not rely on this “Gem”, otherwise he would not only have foolishly overstepped it, as Meillassoux alleges, but he would also vindicate those detractors (Hegel, Strawson, Stove, Musgrave, Guyer, Langton, Westphal) who complain that he relies on it in the first pace. What Meillassoux does share with these critics, however, is a transcendentally realist interpretation and critique of Kant’s idealism. This brings me to the second problem: that Meillassoux’s defence of correlationism is predicated on a fundamental misunderstanding of Kant’s idealism.

Neither the correlationist circle nor two-step arguments reflect the depth of Kant’s central insight in the Deduction, namely that it is because the categories are concepts of objects of intuition in general, whether sensible or intellectual, that their ‘scope … necessitates a Critical restriction … [because] their reach exceeds their grasp’.\textsuperscript{811} The correlative and reciprocal scope restriction of the understanding and sensibility is not required because we cannot \textit{think} things in themselves; it is required because we cannot \textit{know} them. Indeed, Kant’s correlationism is “strong”, precisely insofar as what can be \textit{thought} about things \textit{considered} as they are in themselves – or indeed anything at all – is correlated with the rules of our understanding, i.e., “for us”. However, because the transcendental model for cognition of things in themselves entails the unrestricted application of the categories, \textit{genuine} knowledge of things as they are in themselves, whatever that might mean, is impossible for mere finite cognisers.

Evidently, Meillassoux takes Kant’s idealism to be a type of phenomenalism, according to which the existence of spatio-temporal objects depends on the \textit{material existence} of human beings.\textsuperscript{812} While it is true that, for Kant, empirical reality depends on us insofar as what we can experience accords necessarily with the conditions of our possible cognition, this is not at all to say that in the absence of the existence of human beings – or indeed the material requirements for their coming in to existence – objects considered in relation to these conditions would

\textsuperscript{811} Allison, Guyer, Wood, ‘Debating Allison on Transcendental Idealism’, 35.

\textsuperscript{812} In the final page of his notes in \textit{After Finitude} Meillassoux suggests that the only plausible means of reconciling Kant’s critical philosophy with his evolutionary cosmology in \textit{Universal Natural History} is Kant’s fideism, his belief in an ‘eternal witness … capable of converting [space-time] … into a correlational occurrence’ (138, n.7).
cease to exist. Actual human cognition of the universe requires the existence of human cognisers, but it is the framework of cognition that determines the form of an empirical reality, not the existence of cognisers. For Kant, our knowledge of the universe is limited neither because we are incapable of breaking through a veil of appearances – to see things as they truly are – nor because we cannot think that which is not a thought. Rather, it is because knowledge of the universe and the objects therein entails an epistemic-intuitive framework: a standpoint. On the transcendental model, what it means to know the universe as it is in itself means to know from the standpoint of a purely intuitive intellect; a cognition that somehow creates the universe and its furniture directly from its mind. From this Kantian perspective, the chief error of Meillassoux’s argument is that he assumes that there is standpoint-independent fact of the matter, and that consequently things in themselves are more real than things as they are merely “for us”. I agree with Allison: insofar as the notion of reality is a function of an epistemic-intuitive framework, our empirical reality is neither less nor more real than any other empirical reality, or indeed a non-empirical reality, whatever that might be.

In other words, Meillassoux conflates Kant’s epistemological distinction between appearances and things in themselves – one concerned with the conditions of their cognition – with an ontological distinction between two spheres of reality. Thus he fails to grasp the significance of Kant’s contention that ‘the proud name of ontology … must give way to the more modest title of a transcendental analytic’. The consequence of this is that Meillassoux’s argument does indeed ‘presume[] to offer synthetic a priori cognitions of things in general’. Given that he begins from the view that ancestral statements are fundamentally incompatible with correlationism, it is unsurprising that Meillassoux is expressly committed to accounting for this possibility by extending cognition beyond the confines of sensibility. In this respect, my critique pushes on an open door. Nonetheless, despite the formidable creativity of his efforts to establish an absolute that both fulfils reason’s demand for a final condition and avoids the dogmatism of pre-critical metaphysics, Meillassoux’s argument lends considerable weight to Kant’s contention that dogmatism and contradiction are an inevitable consequence of the very supposition that we have knowledge of things in themselves.

813 I.e., that transcendental idealism is an ‘alternative to ontology…rather than a radical move within ontology’ (Allison, Guyer, Wood, 2007, 35).
814 CPR, A247/B304, 344.
Developments in Neo-Kantian philosophy, especially following the empirical verification of Einstein’s theories of relativity, reflect the serious challenge that modern physics poses to Kant’s idealism. In contrast, Meillassoux’s ancestral statements turn out not to pose any challenge at all. But that contention, it seems, depends on how you read Kant. Meillassoux’s argument evidences the limitations of his engagement with Kant’s thought throughout, which is all the more striking since it is Kant himself who is said to be the great inaugurator of the correlationist disaster. In addition to demonstrating that Meillassoux has misunderstood many of Kant’s central doctrines – especially those of the Aesthetic and the Analytic – I have argued that his approach exemplifies the transcendental error and illusion at the heart of Kant’s critique of transcendental realism, in both its empiricist and rationalist guises. And it is for this reason that his speculative materialism – his putatively non-metaphysical metaphysics – seems to suffer from the very dogmatism it repudiates. Indeed, the contradictions to which Meillassoux’s argument give rise suggest that he ‘must somewhere be proceeding on the grounds of … error.’ The central error is a failure to engage with another reading of Kant’s argument than the “ontological” one he simply presupposes.

The deep puzzle of how Kant conceived of the relationship between the understanding and our forms of intuition, is far less pressing than the fact that there is simply no way to square Einstein’s theory of relativity with Kant’s idealism without a fundamental alteration of the latter. As Hans Reichenbach explained, however tempting it has proven to ‘eliminate these difficulties through a distinction between “physical time” and “phenomenal time” … this distinction is not in the Kantian tradition … [Kant] would not have conceded that one could apply a time order to physical events that was different from that inherent in the nature of the knowing subject’ (1965, 2). Indeed, easily conducted experiments demonstrate that we can directly observe time dilation (e.g., the muon experiment: see Sartori, 2008, 79–81). Whereas the conflict between Einstein’s theory and Kant’s idealism lead Reichenbach to a decisive break with Kantianism, Ernst Cassirer argued that the theory of relativity was the ultimate vindication of Kant’s transcendental idealism because ‘in it, more clearly and consciously than ever before, the advance from the copy theory of knowledge [and the substantialist view of reality] to the functional theory is completed’ (1953, 392). I cannot here address the details of Cassirer’s argument, but it is important to emphasise that it is predicated on two distinctive features of Marburg school Neo-Kantianism. The first is a rejection of Kant’s putatively strict separation between sensibility and concepts on the basis that both have a common logical root in the understanding. As Thomas Rykman (2007, 28) concisely explains, for Cassirer (following Herman Cohen) ‘the pure forms of sensibility as well as the pure concepts of the understanding are but different moments or modes of the fundamental synthetic function of unity, a regulative demand imposed by pure thought that cognition continually strives to satisfy but can never complete.’ Secondly, for both Cassirer and Cohen what Kant’s Deduction actually shows is that general logic is derived from transcendental logic. This licenses their radical view that the task of transcendental philosophy is to draw out the fundamental concepts underpinning our knowledge as it is actually produced in scientific work. Indeed, on their view it is through the analysis of the a priori conditions for the possibility of such knowledge that we determine the formal principles upon which knowledge of the world is predicated. So construed, the categories of the understanding are an historical product, guided by the norms of scientific enquiry and reason’s drive for ever greater unity and explanatory power. While this distinctive interpretation of transcendental idealism may indeed be compatible with Einstein’s theory of relativity, it remains to be seen whether it is compatible with Kant.

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\[^{816}\text{CPR, Aviii, 99.}\]
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