

Prison Break? In Defense of Correlationism

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“Language may be a distorting mirror, but it is the only mirror we have”¹

Abstract

A core presumption of object oriented ontology and other speculative realisms is that there is a world independent of the mind that can be successfully inquired and should take center stage in our reflections again. A profound case for this realist presumption is found in Meillassoux’s *After Finitude*. He aims to secure our access to reality *as it is in itself* by refuting correlationism according to which we cannot escape reality *as it is thought by us*. He presents three arguments: ancestrality, facticity and mathematization. On the first argument correlationism fails because it cannot render scientific statements about an universe anterior to us meaningful. I address the worry that he might not take this to be a real *argument* against correlationism and argue that it in any case fails. On the second argument correlationism is flawed since it remains committed to absolute possibilities. I argue that this argument is untenable as well. On his third argument correlationism fails because science reveals a mathematically describable reality indifferent to our existence. I argue that the almost perfect mathematization of nature can actually be cashed out as an argument *for* correlationism. I conclude by proposing an alternative way of showing that mathematics is the language of the absolute understood as a radical contingent hyperchaos.

Keywords: Epistemology, Correlationism, Object oriented ontology, Speculative realism

1. Introduction

Object oriented ontology as founded by Graham Harman and further developed by Levi Bryant, Timothy Morton and Ian Bogost, and also closely related instances of speculative realism such as the realisms of Ray Brassier and Iain Grant, all share a number of philosophical convictions. One of the most important of these shared convictions is the presumption that we can overcome

¹ Dummett 1993, 6.

correlationism and successfully inquire into the world in itself. We are not caught or trapped in the correlation or interplay between the human mind and world. So they all share a critique of correlationism. One opposes post-Kantian philosophers who take the correlation as central to philosophy. On aforementioned realist presumption we can successfully engage in a discourse on the nature of reality in its own right apart from our human access or relation to it. Not being imprisoned by the human-world correlate is a necessary condition for the possibility of object oriented ontology and other speculative realisms. But why would anyone accept it? A profound case for this core presumption of speculative realism is found in Meillassoux's *After Finitude*.²

Meillassoux is often considered as the one who warranted speculative realism by *demonstrating* that we can escape the correlation and inquire reality as it is *in itself*. If he did liberate us from the prison of human relativity, he perhaps unintentionally also enabled a loss of the privilege of the human relationship to reality over all other relationships.³ This is relevant for object oriented ontology and Iain Hamilton Grant's account of speculative realism.⁴ For both maintain that the human subject and its perspective aren't special. On object oriented ontology human subjects are merely objects among all other kinds of objects. All entities and their relations are placed on equal ontological footing. After finally having been freed from the limited privileged human relation to the world – after having escaped reality *as conditioned by us*, various object oriented philosophers claim to have discovered how uncommon and weird 'the great outdoors' really is.

That's why speculative realism is often aptly referred to as "weird" realism by Graham Harman and other speculative realists.⁵ They found out that reality *as it is not projected by us* is actually a very strange and curious place. Harman has it that the world is a mixture of objects that forever withdraw from each other and interact indirectly via 'vicarious causation'.⁶ On Ray Brassier's reductive eliminativism absolute reality is ultimately nothing more than a nihilistic meaningless void, on Levi Bryant's object oriented ontology called "onticology" reality consists of dynamic differences producing objects themselves wholly composed of differences, and for Meillassoux the absolute is necessarily a radically contingent cartesian hyperchaos.⁷ Strange systems indeed.

² Meillassoux 2008 – hereafter 'Meillassoux'.

³ Perhaps unintentionally because he still thinks humans are special, a referee pointed out.

⁴ I thank aforementioned referee for referring to Grant.

⁵ Harman 2018.

⁶ Ibid.

⁷ Brassier 2007, Harman 2018.

But again, is the core presumption on which object oriented ontology and other realisms depend sufficiently justified? Did Meillassoux's attempt succeed? Did he liberate us from the prison of human privileged anti-absolutism? Is his demonstration of realism convincing? Let's find out.

In *After Finitude* Meillassoux strives to regain access to the absolute, that is, to how the world is *in itself* rather than how it is experienced and thought *by us*. His main opponent thus is post-Kantian critical philosophy, which is premised on the thesis that what we call 'reality' appears inescapably as the correlate of our language or thought. Post-critical Kantians subordinate our knowledge of the "great outdoors" to our epistemic relation with it. Since it is impossible for us to step outside our human cognitive capacities, we will never be able to access reality as it is independently from us. We will never be able to know anything about the nature of the absolute. Philosophers within the post-critical phenomenological and existential tradition hence turned away from absolute reality. They focused on language, consciousness or some other suggested realm of the 'for us' and not on how being is independently from us. For them any post-critical attempt to regain access to the 'in itself' is discarded as pre-critical and even naive.

Yet, Meillassoux is not returning to a pre-critical stance. He purports to think reality in itself again, but without going back to pre-critical thought. His aim is to show that post-Kantian *correlationism*, the idea that we as human beings have only access to the correlation or interplay between thinking and being, and never to being itself, is untenable. For that he provides three arguments against correlationism in his book. The argument from *ancestrality* purports to show that correlationism fails because it cannot render scientific statements about a world anterior to our relationship to the world meaningful. His argument from *facticity* aims to establish that correlationism is incoherent, since it remains committed to absolute possibilities. His argument from *mathematization* intends to conclude that correlationism must be rejected because modern science has revealed a mathematically describable physical world that is totally independent of human existence. In this article I present and analyze these three arguments, and argue they all fail. Thus, despite Meillassoux's original attempt to break the post-Kantian correlationist circle, to escape from prison, he did not regain access to the absolute. We remain in the 'for us'.

In the next section I outline in more detail the position Meillassoux wants to overcome, namely correlationism. In section 3 I present his argument from ancestrality against correlationism. I'll also discuss the preliminary question of whether he takes ancestrality to be an *argument* against correlationism at all – and if so, how strong he takes this argument to be. In section 4 I argue that his appeal to ancestrality is actually based on a false dilemma and therefore not convincing.

In section 5 I describe his argument from facticity. I argue that this argument does not succeed either due to a confusion between epistemic and ontological possibilities. In section 6 I discuss his third argument, namely the argument from the almost perfect mathematization of the world. I argue that, contrary to Meillassoux, the apparent exhaustive mathematization of reality can in fact be cashed out as an argument *for* correlationism. Section 7 concludes the article.

2. Correlationism

In his book Meillassoux provides a detailed account of the post-Kantian position that he wants to reject. He has coined the view *correlationism*. Its central concept is the *correlation*, that is to say, the correlation between thought and being. According to correlationism “we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other.”⁸ Its main thesis is that human experience and thought cannot get outside itself in order to compare the world as it is ‘in itself’ to the world as it is ‘for us’. We simply cannot establish which aspects of reality are independent from our cognitive faculties and which are a function of our cognitive relation to the world. All we as human beings can ever apprehend are correlates. We are always and already situated “in the midst of the correlation.”⁹

Correlationism departs from the epistemic primacy of the correlation, that is to say, of the relation between thought and world, over the related terms. Says Meillassoux:

“The ‘co-’ (of co-givenness, of co-relation, of the co-originarity, of co-presence, etc.) is the grammatical particle that dominates modern philosophy, its veritable ‘chemical formula’. Thus, one could say that up until Kant, one of the principal problems of philosophy was to think substance, while ever since Kant, it has consisted in trying to think the correlation. [...] [T]o ask who has grasped the more originary correlation: is it the thinker of the subject-object correlation, the noetico-noematic correlation, or the language-referent correlation? The question is no longer ‘which is the proper substrate?’ but ‘which is the proper correlate?’ During the twentieth century, the two principal ‘media’ of the correlation were consciousness and language, the former bearing phenomenology, the latter the various currents of analytic philosophy.”¹⁰

⁸ Meillassoux, 5.

⁹ Ibid., 11.

¹⁰ Ibid., 5-6.

The correlation of thought and being is thus not necessarily the same as the relation between subject and object. Many post-Kantians hold that the correlation is of a more original, fundamental or inclusive nature. The inescapable epistemic togetherness of thinking and being is akin to a wide range of post-critical positions within continental and analytical philosophy, including, say, Heidegger's *Dasein* and *Ereignis* as the co-propriation of man and being and Carnap's dismissal of cognitive external questions.

Further, as Meillassoux points out,

“correlationism is not a metaphysics: it does not hypostatize the correlation; rather, it invokes the correlation to curb every hypostatization, every substantialization of an object of knowledge which would turn the latter into a being existing in and of itself. To say that we cannot extricate ourselves from the horizon of correlation is not to say that the correlation could exist by itself, independently of its incarnation in individuals.”¹¹

He articulates the point of correlationism very aptly when he writes:

“Consider [this scientific] statement: ‘Event Y occurred x number of years before the emergence of humans’. The correlationist philosopher will in no way intervene in the content of this statement: she will not contest the claim [...]. No – she will simply add [to this statement] – something like a simple codicil, always the same one, which she will [...] append to the end of the phrase: ‘Event Y occurred x number of years before the emergence of humans –*for humans* [...].’ This codicil is the codicil of modernity.”¹²

Thus, precisely because we cannot get beyond or step out of our human condition, everything we say, experience or think is always already relative to us. This prior ‘for us’ is inescapable. The absolute “great outdoors” of pre-critical philosophy is inaccessible. We will never reach out to reality as it is not relative to us, as it exists in itself regardless of thought.

Correlationism is a “catchy” name for this post-critical epistemology. However, I think that the concept of correlation is not adequate to sketch the position. For it still seems to assume too much. If access to the ‘in itself’ is impossible for us, then we cannot know either that we are trapped in a *correlation between* our thought and being. For on correlationism, for all we know, consciousness might be all there is. It might be true in an absolute sense that only mind exists.

¹¹ Ibid., 11.

¹² Ibid., 13.

In that case it would not be appropriate to speak of a *co*-relation. There would be in fact a sort of mental *monism* instead of a *correlation* between thinking and being. Since the correlationist cannot rule out such an absolute idealism, the term ‘correlation’ assumes in fact too much.

In what follows I will flesh out the theory of knowledge that Meillassoux so creatively coined *correlationism*. Given that as mentioned the concept “correlation” has the conceptual difficulty of excluding mental monism, I shall describe the position in terms of *the-world-for-us* and *the-world-in-itself*.¹³ Yet, what I say accords with Meillassoux’s characterization of correlationism.

The constitutive distinction of correlationism is the distinction between the-world-for-us and the-world-in-itself. The-world-for-us is the world as implied by the human point of view. It is the world as thought and perceived by us humans. The-world-in-itself is the world as it exists in and for itself in an absolute sense. It is the absolute.

The-world-in-itself is inaccessible for us. It is impossible for us to get outside ourselves in order to compare the world as it is ‘in itself’ to the world as it is ‘for us’. We do not have access to such an absolute stance since we cannot have knowledge of anything independent of our *human way of thinking and perceiving*. We are trapped in our human condition. We can only access the world from our human viewpoint. In other words, we cannot think or perceive something while abstracting from the fact that it is still *we* who are thinking or perceiving it. Indeed, if we think or perceive anything as true about the in-itself, then what we think or perceive is still a human thought or human experience. All our knowledge is inescapably *qualified* as human knowledge. And we cannot get rid of this qualification. Thus a “view from nowhere” is for us unreachable. Absolute knowledge is therefore unobtainable. The-world-in-itself is unknowable because our knowledge is always inevitably *relative* to our human conditions of knowledge.

Is this then Kantianism or transcendental idealism? Surely not, for contrary to Kantianism or transcendental idealism, even the metaphysical claim that there are things outside us grounding our experience, can only be justified as a statement about the-world-for-us. So, Kant’s dictum that there are *Dinge-an-sich* or objects that ground our human experience is only warranted as a claim *within* the-world-for-us. Kant took his famous distinction between the noumenal world and the phenomenal world as an absolute. But contrary to Kantianism, we do not know whether this distinction is absolutely true. On correlationism it is nothing more than a claim about the-world-for-us and not about the-world-in-itself. Indeed, Kant’s dictum is a distinction *within* the-

¹³ Rutten 2020.

world-for-us. Moreover, even the utterly fundamental distinction between the-world-for-us and the-world-in-itself is ultimately only justified as an assertion about how the world is *for us*. For again, really *everything* we think and say applies to the-world-for-us. Contrary to transcendental idealism, the-world-for-us is the ultimate unsurpassable horizon of *all* our human experience and *thought*. It is *for us* the holistic all-inclusive. We are always already *in* it. The-world-for-us is the subject of *all* our predication, even those that distinguish it from the-world-in-itself.

Is then the-world-for-us epistemology a form of metaphysical or speculative idealism? No, it is not. Metaphysical or speculative idealism claims to know the-world-in-itself. On metaphysical or speculative idealism the ‘in-itself’ is consciousness or mind and nothing exists outside it. But this claim cannot be warranted because we cannot know the in-itself. Is it then realism? No, for again we know nothing at all about the in-itself; and therefore also not whether realism is true.

Now, let us draw a map exactly as Graham Harman did in his book on Meillassoux under the name “Meillassoux’s Spectrum”.¹⁴ According to *realism* there are minds and mind-independent objects. Minds can know these objects. *Kantianism* or *transcendental idealism* also has it that there are minds and mind-independent objects. But these minds cannot know these objects. Further, *metaphysical* or *speculative idealism* asserts that there are only minds. All objects are mind-dependent constructions and known to be such. According to yet another position, let’s call it the *epistemic stance*, there are minds. But we cannot get outside our minds. So we do not know whether there are mind-independent objects. And if there are objects outside us, we do not know whether they are similar to what is grasped by our minds, or quite different.

On this map correlationism is yet another position. On *correlationism* or the *meta-epistemic stance* all distinctions, even those between ‘mind’ and ‘mind-independent object’, between ‘the inside’ and ‘the outside’, between ‘subject’ and ‘object’, between ‘experience’ and ‘that what grounds experience’ are only justified as human-relative distinctions. Distinctions such as those between ‘minds’ and ‘mind-independent objects’, between ‘inside’ and ‘outside’, and between ‘subject’ and ‘object’ might not apply to the in-itself. Because of the inescapable inaccessibility of the-world-in-itself we will never know. For everything we say can only be justified as a claim about the-world-for-us. As said, even the very distinction between the-world-for-us and the-world-in-itself is merely justified within the-world-for-us from which we simply cannot escape.

¹⁴ Harman 2011.

Now, should all this worry metaphysicians? Not at all. I fully accept correlationism. In fact, I believe that it is precisely correlationism that enables us to justifiably do metaphysics after Kant. Let me briefly explain why. Within *the-world-for-us* we can justify many, many claims. Examples include, but are not limited to, logical propositions such as the principle of modus ponens, non-contradiction and truth-bivalence, mathematical statements such as the theorems of set theory, ordinary claims (such as that I exist, or that Liza exists instead of being merely a product of my thought; that the glass of water in front of me exists extra-mentally as well, that Paris is the capital of France, etc.), and moral claims, such as that it is wrong to torture people for fun. In fact, even the whole project of metaphysics can be carried out entirely *within* *the-world-for-us*, as long as we fully realize that all our metaphysical claims, similar to all other claims we do, are about *the-world-for-us* and can never be justified as claims about the *in-itself*.

Realists who are unable to *refute* correlationism often merely aim to *disqualify* it by resorting to what Meillassoux calls the ‘Rhetoric of the Rich Elsewhere’: “[L]et’s leave the fortress as it is, and let’s explore the world in all its vastness! [...] There are so many interesting realities to investigate! [...] Let’s stop discussing, and let’s open the windows: let’s inhale things and feel the breeze!”¹⁵ But this rhetoric fails since it equally applies to *the-world-for-us*. All our projects – even the whole project of metaphysics – can be properly carried out *within* the *for-us*. We can do our metaphysics and discover many interesting things and facts inside *the-world-for-us*. Here we arrive at a valid *metaphysics-for-us*. Such a metaphysics is in fact quite powerful since many fruitful classical metaphysical principles can be justified as principles about *the-world-for-us*.

For example, contrary to what Meillassoux seems to believe, embracing “sceptico-fideism” is not the only way for religious believers to find support in correlationism.¹⁶ For metaphysically inclined theists may aim for “a return of the religious” by purporting to develop their onto- or natural theology *within* the context of *the-world-for-us*, so as to arrive at, say, a *God-for-us*.

In any case we can explore the full richness of all objects, relations and structures *in* the *for-us*. And this is sufficient. For what else could we as *human beings* wish for than to justify claims about how the world is *for us*? Indeed, what else could we as *human beings* wish for than to be justified *as human beings*? After all, *we are human beings*, not gods. The *in-itself* is and remains

¹⁵ Brassier, Grant, Harman, & Meillassoux (hereafter “Speculative Realism”) 2007, 423.

¹⁶ Meillassoux, 43-9.

inaccessible. That is what we should concede to the radical skeptic. But we can still find truth: objective universal truth within the-world-for-us. And *for us humans*, that should be sufficient.

3. The ancestral challenge

In *After Finitude*'s first chapter Meillassoux presents his first argument against correlationism. He calls it the argument from ancestrality. It is not entirely clear how strong Meillassoux takes this argument to be. More specifically, is the argument an attempt to *refute* correlationism? That is to say, is the argument intended to be a *fatal* objection against it? It's not even clear whether he considers it to be an *argument* against correlationism. The problem of ancestrality may only be a way “to awaken us from our correlationist slumber, by enjoining us to reconcile thought and absolute.”¹⁷ This interpretation is supported by what Meillassoux says during the Q&A of his lecture at ‘Speculative Realism: A One-Day Workshop’ that took place in April 2007 at the University of London – a workshop that brought together the at the time “four horsemen” of “weird” or speculative realism: Ray Brassier, Iain Grant, Graham Harman, and Meillassoux:

“In *After Finitude* I try to persuade the reader with what I call ‘the problem of the arche-fossil’. The problem of the arche-fossil was for me a way to write in a context principally dominated by correlationist philosophy. So I tried to show the correlationist reader – probably a correlationist – that there could be a problem in correlationism. The whole first chapter is saying: maybe there is a problem with this metaphysics … And I just demonstrate the problem like that.”¹⁸

So ancestrality seems not really an *argument* against correlationism. It doesn't refute it. At most it results in a situation of *parity* between correlationism and realism, thus arriving at an *aporia*. This fits nicely with the fact that, as is quite obvious from *After Finitude* and the aforementioned lecture, he takes correlationism to be a highly respectful and very strong position that cannot be so easily refuted. Indeed, says Meillassoux: “By the term ‘correlation’, I also wanted to exhibit the essential argument of these ‘philosophies of access’, as Harman calls them; and – I insist on this point – the exceptional strength of this argumentation, apparently and desperately implacable.”¹⁹ Thus, for example, François Laruelle's alleged refutation of the circle – on which Ray Brassier relies in *Nihil Unbound* to reject correlationism – doesn't convince him *at all*. By

¹⁷ Ibid., 128.

¹⁸ Speculative Realism, 438-9.

¹⁹ Ibid., 409.

appealing to a quite strong Fichtean version of correlationism he shows that François Laruelle's argument against correlationism is untenable.²⁰ It's merely a disqualifying *coup de force* that doesn't refute it. It doesn't break the circle. That's why in the last part of his lecture Meillassoux says: "This necessity of a second argument is extremely important, since, as we shall see, it will become the flaw of the circle-fortress. This second argument, as I claimed in *After Finitude*, is the argument of facticity."²¹ So he sees invoking ancestrality as insufficient to escape the circle.

On the other hand Meillassoux is quite clear in *After Finitude* that the arche-fossil or ancestrality presents a *challenge*, *difficulty*, *paradox*, and *problem* for correlationism.²² How correlationists interpret or propose to account for ancestrality is deemed *insupportable*.²³ Meillassoux indeed refers to the problem of ancestrality as an *argument* or *objection* to which the anti-absolutistic *opponent* must respond.²⁴ And the *argument* from the ancestral is moreover considered *valid*.²⁵

Meillassoux ultimately holds that the correlationist does not prevail dialectically in light of the arche-fossil.²⁶ He even concludes at the very end of the first chapter of *After Finitude* that the correlationist circle is *irremediably incompatible* with ancestrality.²⁷ It thus still seems that the argument from ancestrality *refutes* correlationism according to Meillasoux. So he actually takes it to be a *very powerful* argument that results in a *fatal* objection to correlationism. That's why "weird" realists such as Graham Harman adequately point out that Meillassoux's "appeal to an "ancestral" realm prior to all human access succeeds in defining an unexpected new battlefield for continental thought."²⁸ A *battlefield* moreover that *threatens* the circle.²⁹ Meillassoux takes it that "by reducing ancestral reality to reality-for-us, correlationism fails to do it justice."³⁰ It

²⁰ Ibid., 418-21.

²¹ Ibid., 428.

²² Meillassoux, 11, 21, 22, 23, 26.

²³ Ibid., 16.

²⁴ Ibid., 18, 19, 22.

²⁵ Ibid., 22.

²⁶ Ibid., 24.

²⁷ Ibid., 27.

²⁸ Harman 2007, 104.

²⁹ Ibid., 107.

³⁰ Ibid., 109.

is with this that Harman agrees when he asserts: “[...] we know through his brilliant argument at the beginning of his book that there must be an ancestral realm outside of knowledge.”³¹

So let's consider and confront the challenge of the arche-fossil as a rebutting *argument* against correlationism and explore its dialectical strength. In what follows I describe the argument as Meillassoux presents it. After that I provide my maximally charitable version of the argument, which I take to be its strongest version. This version is still inspired by what Meillassoux writes. I shall then argue that the argument, even at a high point of rigor, and although ingenious, fails.

Meillassoux starts his outline of the argument with the observation that contemporary science has established beyond reasonable doubt that the cosmos is older than the advent of human life. There have been many events anterior to the coming into being of human beings, such as the origin of the universe itself (13.8 billion years ago), the accretion of the earth (4.6 billion years ago) and the extinction of the dinosaurs (66 million years ago). Meillassoux calls events that took place before the advent of human life *ancestral*. Now, anyone who takes science seriously must accept that ancestral events took place. This is undeniable. Time, space and matter clearly did exist before there were human beings. The history of the cosmos is much older than that of human life. Meillassoux then asks the following question:

“How are we to grasp the *meaning* of scientific statements bearing explicitly upon a manifestation of the world that is posited as anterior to the emergence of thought and even of life – *posited, that is, as anterior to every form of human relation to the world?* Or, to put it more precisely: how are we to think the meaning of a discourse which construes the relation to the world – that of thinking and/or living – as a fact inscribed in 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?”³²

So, given that the ancestral statements of contemporary science are in fact indisputable, how is correlationism able to accept these statements? Ancestral claims clearly impose no problem for realism. For the realist it is no surprise that the world we experience existed a long time before we came into being. After all, he or she takes it that the world we experience is the world as it exists in itself independently from us. But scientific ancestral statements do pose a problem for

³¹ Speculative realism, 387.

³² Meillassoux, 10.

the correlationist. Or so Meillassoux thinks. Here is why. If science tells us that the correlate emerged *in the world*, how can correlationists then maintain that it is the *givenness of the world*?

The only option for the correlationist seems to be to interpret ancestral statements in a specific way. Yes, the universe originated 13.8 billion years ago, before the advent of human beings. But this claim is justified only as a claim about how the world is *for us*. It doesn't say anything about the world 'in itself'. And yes, science teaches that the earth came into being 4.6 billion years ago. But again, this undeniable fact is only a fact *for us*. Whether it is true of the world *in itself* remains wholly unknown for us. Here we see how correlationists invoke the 'codicil of modernity' to move from a common 'face-value' realist meaning of ancestral statements to the more originary correlationist meaning. The reason for this crucial move is that on correlationism the face-value realist meaning of ancestral statements cannot be the ultimate meaning. For that would entail that we have gained access to a being that is not co-extensive with our relation to it, that is, a being anterior to the correlate. But such access is impossible on correlationism.

Yet, as Meillassoux continues to argue, this strategy of shifting towards an alleged deeper or more fundamental meaning by invoking the 'for us' codicil does not help the correlationist. The correlationist can speak only of what is given to us, but then the emergence of the correlation of thought and being *within* the cosmos is *unthinkable*. As he writes:

"An ancestral statement only has sense if its literal sense is also its ultimate sense. If one divides the senses of the statement, if one invents for it a deeper sense conforming to the correlation but contrary to its realist sense, then far from deepening its sense, one has simply cancelled it. This is what we shall express in terms of the ancestral statement's *irremediable* realism: either this statement has a realist sense, and only a realist sense, or it has no sense at all."³³

Thus correlationists cannot reconcile the indisputable ancestral statements of science with their correlationism. So the position allegedly fails. It is not really clear though how his argument is supposed to work exactly. He is certainly not only saying that science is right and correlationism is wrong. I shall propose a maximally strong version of Meillassoux's argument. It's inspired by what he writes. But given my earlier remarks on the concept of "correlation", I shall cast the argument in terms of the pair I used in my master thesis, i.e. world-for-us and world-in-itself.

³³ Ibid., 17.

Science tells us that there was a time before our existence. The correlationist accepts this claim as a claim about how the world is *for us*. Therefore, the proposition [There was a time at which we did not exist] is justified as a claim about the-world-for-us. Now, our human existence is a necessary condition for the-world-for-us to be there. Since also this insight is only ‘for us’, the proposition [Our existence is a necessary condition for there being the-world-for-us] is again only justified as a claim about the-world-for-us. Both propositions logically entail [There was a time at which a necessary condition for there being the-world-for-us did not exist]. Since the logical laws are justified as claims about the-world-for-us it follows that the proposition [There was a time at which a necessary condition for there being the-world-for-us did not exist] is also properly justified as a claim about the-world-for-us.

The latter proposition analytically entails the proposition [There was a time at which the-world-for-us did not exist] so that [There was a time at which the-world-for-us did not exist] is properly justified as a claim about the-world-for-us as well. There are now two options. Either (i) the-world-for-us is a necessary condition for the existence of time or (ii) time is absolute.

Suppose that (i) the-world-for-us is a necessary condition for the existence of time. In that case the proposition [There was a time at which a necessary condition for the existence of time did not exist] is justified as a claim about the-world-for-us. It entails the proposition [There was a time at which time did not exist]. Therefore [There was a time at which time did not exist] is also justified for us. But this proposition is *contradictory* and thus actually *not* justified for us.

So, correlationists have to reject (i). From this it follows that (ii) time is absolute. Time belongs to the in-itself. We have obtained knowledge of the absolute. The correlationist circle is broken and correlationism fails. A correlationist may respond that the claim that time is absolute is only justified as a *human, all to human* claim, that is to say, the proposition [Time is part of the-world-in-itself] is only justified as a claim about the-world-for-us. Thus the circle isn’t broken.

But this does not help the correlationist. For the correlationist must accept that the proposition [We cannot know anything about the-world-in-itself] is justified for-us, which contradicts with proposition [Time is part of the-world-in-itself] being also justified for us. So there is no escape for the correlationist. Correlationism leads to contradictions *for us* and must thus be rejected.

Although the argument from ancestrality is not available *in this specific form* in Meillassoux’s first chapter, I believe it is in fact the most charitable and strongest interpretation of his appeal to ancestrality as a serious challenge for and indeed a rebutting argument against correlationism.

4. The ancestral argument refuted

But the correlationist can, I think, refute the argument. The dichotomy between (i) and (ii) is a false dilemma. If the-world-for-us is not a necessary condition for the existence of time, that is to say, if (i) is false, it doesn't follow that time belongs to the in-itself, that is, it's doesn't follow that (ii) is true. There is a third alternative. For all we know it might be true of the in-itself that (iii) there is no time without consciousness and there is a non-human conscious subjective being whose subjective world does contain time. Since we cannot rule out this possibility – nor many other even more elaborated possibilities – the negation of (i) doesn't entail (ii). Thus a refutation of (i) does not result into knowledge of the in-itself. The correlationist circle remains intact.

An advocate of the ancestral argument might reply that even though the dilemma may be false, the correlationist still has no choice but to accept that the proposition [The-world-for-us isn't a necessary condition for time] – being the negation of (i) – and the proposition [We cannot know anything about the-world-in-itself] are both justified for us. Since these propositions logically contradict each other, correlationism still fails. We escape the prison of the ‘for us’ after all. I'll not go further into this. For below I shall show that the ancestral argument fails regardless. Let me therefore assume *for the sake of argument* that the aforementioned reply is convincing.

Take the claim that our existence is a necessary condition for the-world-for-us to be there. Call this claim C. Is C indeed justified *for us*? No, it isn't. Precisely because we don't know anything about the-world-in-itself, it might – for all we know – be the case that the-world-for-us actually *is* human independent reality. In other words, since we don't know anything about the *in itself* of the-world-for-us, we cannot rule out the possibility that realism is in fact true. But obviously, if the-world-for-us *is equal to* human-independent reality, there being humans is not a necessary condition for the-world-for-us to be there. For, clearly, our existence isn't a necessary condition for the existence of human independent reality. Therefore claim C is not justified *for us* and the ancestral argument fails.

However, this would be too quick. An advocate of the ancestral argument could object that in this response the term ‘the-world-for-us’ is taken *de re* instead of *de dicto*. The advocate might say that on a *de re* reading of the term ‘the-world-for-us’ our human existence might indeed not be a necessary condition for there being the-world-for-us. For realism might be absolutely true and in that case the-world-for-us taken *de re* simply *is* human independent reality. In order for the ancestral argument to really succeed – that is, succeed *if* we for the sake of argument assume that the reply to above's refutation of the dilemma is cogent – advocates of the argument must

opt for a *de dicto* reading of ‘the-world-for-us’. We must focus on the-world-for-us *qua world-for-us*. Without us there is no *manifestation* of a ‘for us’. Without us there is no *givenness of being*. In *this* sense human beings are a necessary condition for the existence of the-world-for-us. Now, on *this* reading, as the advocates may hold, the ancestral argument succeeds after all.

Here’s how correlationists can respond. On a *de dicto* reading of ‘the-world-for-us’ advocates of the ancestral argument appear to be “hypostatizing” the-world-for-us. But reifying the-world-for-us violates correlationism. On correlationism the-world-for-us cannot be substantiated since we cannot affirm anything about the *in itself* of the-world-for-us. For doing so would entail that we are affirming something about absolute reality, which on correlationism is epistemically wholly unjustified. Correlationists can refute the objection by pointing out that we should never engage in reflections on the nature of the-world-for-us. Indeed, the-world-for-us *in itself* is for us *terra incognita*. This response to the advocate’s objection resembles a correlationist rejoinder that Meillassoux himself presents in *After Finitude* in order to refute it, namely that of conflating ‘object-level’ and ‘meta-level’. He expresses the correlationist rejoinder as follows:

“Your objection [...] evinces an elementary confusion between the empirical and the transcendental level [...]. [T]hese two levels of thought – the empirical and the transcendental – are like the two faces of a flat sheet of paper: they are absolutely inseparable but they never intersect. But your mistake consists precisely in allowing them to intersect – you have turned a structure which should have remained flat into a Möbius strip.”³⁴

The point is that talking *about* the *in itself* of the-world-for-us comes down to hypostatizing it and thus treating it as an object among the objects *in* the-world-for-us. By doing so, two levels of reflection, the-world-for-us and objects *within* the-world-for-us, are crossed which are never to be crossed. There are objects in the-world-for-us and there is the-world-for-us as a *condition* for there being objects for us. This *condition*, the-world-for-us as manifestation or givenness of being, cannot be situated at the same level as objects *in* the-world-for-us. As he writes:

“to do so would engender a paradox which, like that of the liar, results from a confusion between discourse and its object. [...] If you do so, you have simply violated one of the

³⁴ Ibid., 22.

basic requirements for the transcendental – but you have not thereby refuted it, you have simply disregarded it.”³⁵

The main point of this response is that the-world-for-us taken as a set of *conditions* or *forms* of cognition resides at the meta-level and should thus not be substantiated as an entity at the object-level. By conflating these two levels, one ignores the very meaning of the transcendental. At the transcendental-level or meta-level there is the-world-for-us which structures or conditions our cognition of objects. At the object-level we talk about objects, while still realizing that the objects we talk about are given to us relative to our human transcendental forms and conditions.

Since we cannot know anything about the ontological nature of the-world-in-itself, we cannot know anything about the ‘in itself’ of those transcendental forms and conditions, preventing us from hypostatizing the-world-for-us. In the same way as correlationists do not absolutize the-world-for-us – for they are not metaphysical or subjective idealists – they do not ontologize the-world-for-us as an entity within the-world-for-us. The-world-for-us isn’t a thing at object level. The-world-for-us may never be substantiated or reified – neither as ‘the absolute’ as speculative idealists do, nor as an entity within “givenness” as advocates of the argument from ancestrality do. I take this response to be cogent. So how does Meillassoux aim to refute it? He answers that

“[t]he core of such a rejoinder consists in immunizing the conditions of knowledge from any discourse bearing on the objects of science by arguing that a transcendental condition is not an object [...]. The notion of condition allows one to ‘de-ontologize’ the transcendental by putting it out of reach of any reflection about being.”³⁶

This is correct, but why would it, given what I’ve said above, be problematic? He claims that on correlationism the transcendental level of knowledge *must* in fact be instantiated at the object level – so that the above response renders correlationism contradictory. Since there must be *in* the-world-for-us a subject that instantiates the transcendental level, the above response of the correlationist results inevitably in a direct refutation of correlationism. Or so Meillassoux holds.

However, the rationale he provides for his claim that the transcendental level of knowledge must be instantiated within the-world-for-us is untenable. I shall present it and argue that it fails. According to Meillassoux the correlationist has no other choice than to concede “that *there is* a

³⁵ Ibid., 23.

³⁶ Ibid., 24.

transcendental subject, rather than no subject.”³⁷ Moreover, “there can only be a transcendental subject on condition that such a subject *takes place*.”³⁸ This then implies that the transcendental subject “remains indissociable from the notion of a *point of view*.”³⁹ For, as Meillassoux argues,

“a subject without any point of view on the world [...] would have access to the world as a totality, without anything escaping from its instantaneous inspection of objective reality. But such a subject would thereby violate the essential finitude of the transcendental subject [...]. [T]he world for it would no longer be a horizon but rather an exhaustively known object [...].”⁴⁰

This, he points out, would contradict with that subject being a transcendental subject. Hence, the transcendental subject “is posited as a point of view on the world, and hence as taking *place* at the heart of the world. The subject is transcendental only insofar as it is positioned *in* the world.”⁴¹ Hence “the transcendental subject is localized among the finite objects of its world.”⁴² The transcendental subject thus “remains indissociable from its incarnation in a body; in other words, it is indissociable from a determinate object in the world.”⁴³ So, a transcendental subject of knowledge is always a subject *in* the-world-for-us, which concludes Meillassoux’s rationale.

Is his rationale convincing? Does it show that there being instantiated subjects *in* the-world-for-us is a necessary condition for “the taking place of the transcendental”? Must a transcendental subject be instantiated by a body in the-world-for-us? The only valid answer on correlationism is: we just don’t know. The possibility of a transcendental uninstantiated subject cannot be ruled out on correlationism, since we do not know anything about the nature of the-world-in-itself. Meillassoux’s rationale indeed fails. Clearly, transcendental subjects do have a “point of view” on the world. But why would it follow from this that they need to be instantiated between the objects *in* the-world-for-us? That is, why must a transcendental subject be instantiated within the-world-for-us in order to have some viewpoint on the world? This doesn’t follow at all. On

³⁷ Ibid., 24.

³⁸ Ibid., 24.

³⁹ Ibid., 24.

⁴⁰ Ibid., 24.

⁴¹ Ibid., 25.

⁴² Ibid., 25.

⁴³ Ibid., 25.

classical theism, regardless of whether it is true or false, God has a point of view on the world. But God is clearly not localized as a subject within the world. Should we now conclude that classical theism is conceptually incoherent? Of course not, it might be false – but conceptually incoherent? That is simply not plausible at all. The rationale for the claim that all transcendental subjects are instantiated in the-world-for-us thus fails. But then Meillassoux's alleged refutation of the rejoinder of the correlationist is not successful. The rejoinder is sound. Consequently, the argument from ancestrality against correlationism fails. Correlationism still stands unrefuted. The circle, the *for-us*, is not broken. Contrary to what Meillassoux asserts, ancestrality doesn't force us to break with correlationism.⁴⁴ It's not "incumbent upon us" to give up correlationism.

5. The argument from facticity

Yet, later on in his book he presents another argument against correlationism. It is called *the argument from facticity*. Let me directly quote the crucial passage. In this passage Meillassoux addresses the correlationist:

"When you think of [realism and idealism] as "possible", how are you able to access this possibility? How are you able to think this "possibility of ignorance" which leaves [both] eventualities open? The truth is that you are only able to think this possibility of ignorance because you have actually thought the absoluteness of this possibility, which is to say, its non-correlational character. Let me make myself clear, for this is the crux of the matter. So long as you maintain that your scepticism towards all knowledge of the absolute is based upon an argument, rather than upon mere belief or opinion, then you have to grant that the core of any such argument must be thinkable. But the core of your argument is that we can access everything's capacity-not-to-be, or capacity-to-be-other, our own as well as the world's. But once again, to say that one can think this is to say that one can think the absoluteness of the possibility of everything."⁴⁵

Meillassoux's argument seems to be that the correlationist must concede that he or she presumes an absolute, namely the *absolute possibility* of any proposition about the-world-in-itself. The correlationist therefore presupposes an absolute. But this renders correlationism self-refuting, since on this view every posited *in-itself* is inevitably relativized to a *for-us*.

⁴⁴ Ibid., 28.

⁴⁵ Ibid., 58.

This argument though is untenable. For, indeed, the correlationist thinks the absoluteness of both possibilities. After all, the correlationist is thinking about a possibility with respect to the in-itself and not with respect to the for-us. But this absolute must be understood correctly. What is the correlationist actually saying? For all we know, she says, realism about the in-itself might be true. Similarly, as the correlationist has it, for all we know idealism about the in-itself might be true. As the 'for all we know' already indicates, both assertions of the correlationist about the in-itself are claims about the absence of knowledge of the-world-in-itself. That is to say, the correlationist merely affirms that realism and idealism are *epistemic* possibilities. She is surely not affirming that these possibilities are *ontological* possibilities. For that would entail that she knows something about the in-itself, which contradicts correlationism. So the correlationist is affirming nothing more than epistemic possibilities of ignorance. She is not saying anything affirmative about the ontological nature of the in-itself. No knowledge of the in-itself is claimed here, which is entirely consistent with correlationism. Meillassoux has therefore not broken the correlationist circle. He didn't regain access to the absolute.

When criticizing Meillassoux's ancestral challenge to correlationism, Peter Hallward points out that the problem of the arche-fossil "seems to depend on an equivocation regarding the relation of thinking and being, of epistemology and ontology."⁴⁶ But the charitable interpretation of the argument from ancestrality I propose above doesn't involve any fatal equivocation. Indeed, it is not the first but the *second* argument against the-world-for-us epistemology that involves a problematic equivocation closely related to the one Hallward refers to in his paper. The second argument from facticity involves an irreparable and thus fatal equivocation between *epistemic* possibilities grounded in our lack of knowledge of the absolute (i.e., "For all we know, it might be the case that X") and *ontological* or absolute possibilities regarding *being* itself (i.e., "There is a possible world such that X"). Here's a simple illustration of the difference between both types of modalities. When Jo, who has no knowledge of mathematics at all, enters a class room and observes a complex *true* mathematical formula on the blackboard, it's from Jo's point of view *epistemically* possible that the formula is *false*. But from this it surely doesn't follow that this true mathematical formula being false is also a real *absolute* possibility of being itself!

Meillassoux appears to apply the principle that everything that's cogently thinkable for us is also absolutely possible with respect to the in-itself. But why then would this be the case? Why would what is merely thinkable for us also be a real absolute possibility of the absolute? This

⁴⁶ Hallward, 137.

doesn't follow. His principle is flawed. Correlationism implies that we cannot rule out that our thought is radically different from the nature of the absolute. It even implies that we cannot rule out that thought and being are wholly incommensurable. So correlationists claim *nothing* about the absolute modal nature of the 'in itself'. That's why Meillassoux's second argument fails.

Let me identify the fatal equivocation in two other expositions of Meillassoux's argument from facticity. Graham Harman provides an helpful explanation of it. I quote the crucial passage:

"[I]f the correlationist is to avoid becoming a subjective idealist, he cannot allow the openness of possibilities to be just one possible option among others. The agnostic correlationist's entire argument hinges on replacing absolute Christianity, atheism, or subjective idealism with an absolute openness. And for this reason, he is forced to throw in his lot with Meillassoux's speculative position. After all, the very possibility of distinguishing between a for-us and an in-itself at all requires that it be absolutely possible that there is more to reality than is currently visible in the correlational circle."⁴⁷

Here the fallacy clearly reveals itself. It's not required for the correlationist to replace those absolute dogmatisms with an absolute, i.e., *ontological* openness. It's sufficient to replace them with an *epistemic* openness. Correlationism is an *epistemic* theory as others agree with.⁴⁸ It is a de-absolutizing epistemology that rejects all knowledge of the absolute. It's not an ontology of the absolute. All that is required for the correlationist is to assert that it is *epistemically* possible that there is more to reality than the invariants of the correlational circle show us. It's not required to affirm this as an absolute or *ontological* possibility. The circle's conditions or forms might be absolute. Or they might not be. The correlationist simply doesn't know and thus leaves both options epistemically open. By doing so no problem for correlationism arises at all.

Harman provides yet another rendering of the crucial step in Meillassoux's argument:

"Either we emphasize the contingent facticity of the correlate and thereby remove its absolute status, or we disavow this contingent facticity in order to turn the correlate itself into absolute reality, and thereby become subjective idealists. No middle ground is possible. Meillassoux chooses the former path, arriving at his speculative position by

⁴⁷ Harman 2007, 110.

⁴⁸ E.g. Hallward, 137.

simply radicalizing what the correlationists already presuppose – namely, the possibility that there might be something in-itself different from what appears to us.”⁴⁹

By now the flaw in Meillassoux’s second argument will be clear enough. There are not really only two options. The proper dialectic response of the correlationist is to affirm “the possibility that there might be something in-itself different from what appears to us” as an *epistemic* and not as an *absolute* possibility. What’s emphasized is the sole *epistemic* facticity of the correlate.

The fatal equivocation in the second argument can also be identified in the exposition of it that Meillassoux gave at ‘Speculative Realism: A One-Day Workshop’ in 2007 in London. I’ll focus again on the crucial fragments. Says Meillassoux: “If facticity can be conceived, if it is a notion that we can effectively conceive – and this must be the case for the correlationist if he wants to *refute* the idealist – then it is a notion we can think as an absolute.”⁵⁰ Now, the correlationist must indeed be able to *think* facticity as an absolute. But what does that mean? It means that he must admit that it is *epistemically possible* that facticity is absolute. But from this it doesn’t follow that he is also committed to the real *ontological* possibility of facticity being absolute – let alone that he would be committed to the claim that facticity is the absolute! These further commitments just don’t follow from the mere epistemic possibility of facticity being absolute.

Thus the second argument does not go through. Here’s an analogy: Eva accepts the epistemic possibility of *ex nihilo nihil fit* being false. *Maybe* – she concedes – something can come from nothing. But granting this doesn’t entail that she also has to affirm that absolute reality is such that it is absolutely or ontologically possible for something to come from nothing – let alone that she has to affirm that it’s absolutely true that something did actually come from nothing!

Likewise the equivocation becomes apparent when Meillassoux continues his explanation:

“What I try to show by this thesis concerns the condition of the thinkability of the essential opposition of correlationism: the opposition of the in-itself and the for-us. The thesis of correlationism is that I can’t know what the reality would be without me, without us, without thinking, without thought. [...] But this reasoning supposes that we have access to an absolute possibility: the possibility that the in-itself could be different

⁴⁹ Harman 2007, 110-1.

⁵⁰ Speculative Realism, 431.

from the for-us. And this absolute possibility is grounded in turn on the absolute facticity of the correlation.”⁵¹

The same problem emerges. The correlationist has only access to the epistemic possibility of the in-itself being different from the for-us. And since this possibility is only epistemic, for all he knows it might *not* be *ontologically* possible that the in-itself is different from the for-us. On correlationism subjective idealism might be *necessarily* true. The circle might *be* the absolute. The correlationist doesn’t know and can’t know. As Meillassoux himself concludes his lecture: “Maybe, maybe. Correlationism doesn’t say it is impossible, it says it’s unknowable.”⁵² Since on correlationism nothing can be known of the absolute, also nothing can be known of the true nature of the correlation. Hence the correlationist’s fundamental notions – for-us and in-itself – are *not* grounded on an implicit absolutization of facticity. For both core concepts are cogently conceptualized and grounded *from within* the circle of correlation. That is, *relative* to us. It seems that Meillassoux thinks otherwise because earlier in his lecture he claims that “describing something means not being in it anymore.”⁵³ This thesis could very well have led him to believe that “everything can be conceived as contingent, depending on human tropism – everything except contingency itself” and “to be is to be factual – and *this* is not a fact.”⁵⁴ His thesis though is untenable. There are many examples of coherent descriptions *from within*. Set theory can be formally expressed in set theory, data models can be properly modelled by data models, and on correlationism the ultimate notions of the in-itself and the for-us can be cogently described from within the correlational circle. Indeed, closing a loop does not necessarily lead to theoretical or practical contradictions. In any case, given the above exposed equivocation, the argument fails.

Still, in one of his thorough discussions of *After Finitude* Graham Harman articulates a related challenge for correlationism that even in light of all considerations above requires a response:

“The strong correlationist [...] speaks *nonsense*. This person says: “I cannot think the unthought without turning it into a thought, and yet the unthought might exist anyway.” But notice that the final phrase “the unthought might exist anyway” is fruitless for this purpose. For we have already heard that to think any unthought turns it into a thought

⁵¹ Ibid., 431.

⁵² Ibid., 449.

⁵³ Ibid., 417.

⁵⁴ Ibid., 432.

[...]. If you accept the argument that thinking the unthought turns it into a thought, you cannot add “but maybe there is something outside [thought]”, because this “something outside” is immediately converted into nothing but a thought for us.”⁵⁵

The correlationist should not be worried though. On correlationism everything we say can only be justified as claim about the-world-for-us. This applies even to the core concepts and claims of correlationism itself, such as the claim that we can reasonably ask whether the-world-for-us is or is not equal to the-world-in-itself. These and all our other claims are always already claims within the context of the-world-for-us. Correlationism is a “loop” that closes without becoming contradictory – just as mathematical logic can be expressed consistently in mathematical logic.

Therefore even the *epistemic* possibilities reported by the propositions [The *unthought* might exist anyway] and [*Maybe* there is something outside thought] are *only* justified *for us*. Indeed, the epistemic possibility expressed by [The-world-in-itself might be different from the-world-for-us] can only be justified as claim about the-world-for-us. By remaining *always* in the *for us* we prevent contradictions. But doesn’t correlationism then collapse into subjective idealism?⁵⁶

No, it doesn’t. On idealism the proposition [There’s nothing outside thought] is justified for us. But on correlationism this proposition – that thought is the absolute – is *not* justified for us. No claim about the nature of the in-itself can be justified as a world-for-us claim. The core argument of idealism, that “we cannot think the unthought because to think anything outside thought turns it into a thought”⁵⁷, does not lead to idealism as absolute truth. It doesn’t even lead to idealism as an ontological truth *for us*. It only leads us to the inescapable *epistemic* prison of the for-us.

So when correlationists claim that something could exist outside thought *for thought*, they only claim an *epistemic* possibility *for us*. The proposition [It’s *epistemically* possible that something exists outside thought] is justified for us, whereas [It’s *absolutely* possible that something exists outside thought] is *not* justified for us. What *can* be coherently asserted is that [It’s *epistemically* possible that it is *absolutely* possible that something exists outside thought] is justified for us. Absolute possibilities are unknowable – also in the *for us*. The modal nature of the absolute is inaccessible for us. Even epistemic possibilities are only justified for us. Never can we know

⁵⁵ Harman, *Continent* 2011, 80-1.

⁵⁶ Ibid., 80.

⁵⁷ Ibid., 80.

that it is absolutely true that something is epistemically possible for us. All our speak, also about epistemic and ontological possibilities, is speak ‘for us’. Correlationism so remains consistent.

6. The Galilean event

In his final chapter Meillassoux provides his third and final argument against correlationism. This argument departs from what he calls the Galilean event. Galileo discovered that science is perfectly capable to mathematize nature. The whole of physical reality, all its structural and dynamical aspects, can be mathematically described. It appears that the world is

“exhaustively mathematizable – the mathematizable no longer designates an aspect of the world that is essentially immersed within the non-mathematizable (i.e. a surface or trajectory, which is merely the surface or trajectory of a moving body), it now indicates a world capable of autonomy – a world wherein bodies as well as their movements can be described independently of their sensible qualities, such as flavor, smell, heat, etc.”⁵⁸

By doing so science reveals to us for the first time a world independent of “any of those aspects that constitute its concreteness for us.”⁵⁹ The idea seems to be that the world as described by science becomes inherently mathematical and thus totally indifferent to precisely those concrete secondary qualities that have always linked the physical world for so many centuries to human observers. In other words, mathematical science presents us a world entirely separate from us. The mathematization of nature exposes a physical reality that is completely independent of human existence. It thus uncovers a world that exists in and of itself, that is, a world that is what it is whether we exist or not. As Meillassoux asserts: “Modern science uncovers *the speculative but hypothetical import* of every mathematical reformulation of our world. Consequently, [...] what is mathematizable cannot be reduced to a correlate of thought.”⁶⁰

Mathematical science thus unfolds a world independent of any human relation to the world, so that correlationism should be given up. Now, this third argument seems not convincing either. Human beings are capable both of sense experience and abstract thought. Further, mathematics is plausibly a product of human abstract thought. But then anyone who argues that the *sensible non-mathematical* qualities of the world indicate a relation to human beings, must admit that

⁵⁸ Meillassoux, 115.

⁵⁹ Ibid., 115.

⁶⁰ Ibid., 117.

the *mathematical* qualities of the world do so as well. In other words, if it can be argued that sensible concrete qualities link the world to us as human observers, it can be argued as well that the world's mathematically intelligible features link it to humans.

That the world appears exhaustively mathematizable can in fact be cashed out as an argument *for* the claim that we only have access to the-world-for-us. Let me explain. Mathematics can be applied successfully to the world. But why is this so? Why is the physical world so perfectly mathematizable? This cries out for some kind of explanation. On realism, there does not seem to be a good straightforward explanation (although some philosophers have opted for a theistic solution according to which God created physical reality in such a way that it can be properly conceptualized by our mathematical concepts). However, on a world-for-us epistemology, the almost perfect applicability of mathematics to reality should come as no surprise at all. For, if mathematics is just extended rigorous thought, which seems plausible, then it is no wonder that the world *as it is thought by us*, that is to say, the-world-for-us, is mathematically intelligible. Indeed, on a ‘for us’-epistemology according to which we can only access the-world-for-us, the successful applicability of our mathematical thought is something we would reasonably expect. So nature's almost exhaustive mathematizability does actually increase the epistemic likelihood of correlationism over realism. Hence Meillassoux's third argument doesn't succeed either.

But let's solely for the sake of argument assume that the third argument goes through. Suppose that it's precisely mathematics that unveils to us the true nature of mind independent reality. In that case the absolute is inherently mathematical. In *After Finitude* Meillassoux aims to project his *principle of unreason* into the things themselves. He aims to establish that the ultimate truth about reality is that there are no sufficient reasons, no grounds, no causes and no explanations for anything. Everything exists or happens for no underlying reason whatsoever. The absolute is pure hyperchaos according to Meillassoux. Therefore, mathematics as the proper language to describe mind independent reality, must in fact be the proper language to describe hyperchaos. But wouldn't that raise a serious problem for Meillassoux's realism? For isn't mathematics the science *par excellence* of the conceptual realm of a priori *provable* and thus *necessary* truths? Mathematical truths seem paradigmatic examples of truths for which there is always a necessary reason. So if reality is radically contingent, how then could mathematics be the proper science

to describe it? As Meillassoux concedes in *After Finitude*, he has indeed not yet convincingly deduced his Cartesian-Badiouian claim that mathematics is the true metaphysics of reality.⁶¹

Peter Hallward points out that in a lecture at Middlesex University in May 2008, entitled *Time without becoming*, Meillassoux comments on his speculative quest to demonstrate convincingly that mathematical science is the language of the *in itself*:

“Meillassoux admits that he has not worked out a full version of this deduction. [...] In a recent lecture, Meillassoux gave a [...] clue to the future development of [it] by insisting on the absolutely arbitrary, meaningless and contingent nature of mathematical signs qua signs (e.g. signs produced through pure replication or reiteration, indifferent to any sort of pattern or ‘rhythm’). Perhaps an absolutely arbitrary discourse will be adequate to the absolutely contingent nature of things.”⁶²

He advances the same point in his Berlin lecture.⁶³ So it’s clear that he realizes himself that he must face the challenge that the at least *prima facie* necessity of mathematics conflicts with his speculative thesis of the radical contingent or hyperchaotic nature of the absolute. Meillassoux must offer some satisfactory account that reconciles both. But is his appeal to the arbitrary signs of mathematics as being radically contingent qua signs a promising pathway to a solid argument for his claim that the-world-in-itself is inherently mathematical? I shall demonstrate below that a far more compelling trajectory is available for Meillassoux to argue that mathematics is indeed the most adequate language for describing a contingent reality that lacks reasons for everything.

It can be found in a short piece I wrote fifteen years ago⁶⁴ and returns briefly in a lecture I gave in 2015 at *Wijsgerig Festival Drift* in Amsterdam.⁶⁵ In short, I argue that the conceptual realm of mathematics is in fact itself radically contingent. That is to say, the mathematical universe is itself a real hyperchaos. All true mathematical propositions – except for an infinitesimal small fraction thereof – are true for no reason at all. All except a neglectable number of mathematical truths are true as a matter of *brute fact*. They are true for no reason whatsoever. Mathematics is

⁶¹ Ibid., 111.

⁶² Hallward 2011, 135.

⁶³ Meillassoux 2012.

⁶⁴ Rutten 2015.

⁶⁵ Rutten 2018, 157-8.

thus ruled by what Meillassoux calls *the principle of unreason*. But then mathematical science is indeed an excellent candidate for his metaphysics of the absolute. Let me elaborate the point.

Kurt Gödel famously showed in the first half of the last century that mathematics isn't a tightly structured formal system of necessary truths. His well-known first incompleteness theorem has it that each consistent formal system which includes (Peano) arithmetic is incomplete. That is to say, each such system will always contain at least one formula that can neither be proven nor disproven. Mathematics as such is incomplete in the sense that no consistent axiom system will ever be able to capture all mathematical truths. Regardless of which specific mathematical truths are counted as the axiom's of mathematics, there will always be unprovable mathematical truths. It was logician and mathematician Gregory Chaitin who increased the impact of Gödel's first theorem tremendously by showing that unprovable truths in mathematics are anything but rare or obscure. They are *everywhere*. The realm of mathematical truths is radically incomplete and hence radically contingent. Each true mathematical formula encodes a quantifiable amount of informational complexity – and true mathematical formulas whose complexity is larger than the complexity encoded in the mathematical axiom's are unprovable, as Chaitin convincingly demonstrated.⁶⁶ They are true without any reason. Their truth is a brute inexplicable fact. There is some complexity threshold, namely the complexity associated with the axioms, such that any true formula whose complexity exceeds it is wholly unprovable. It thus follows that there are essentially just a few provable mathematical truths surrounded by an endless infinite sea of unprovable mathematical truths. The mathematical universe resembles an infinitesimally small island of provable truths in the midst of an infinite ocean of brute contingent truths. So beyond this infinitesimally small island of provable truths, all mathematical truths are just arbitrarily or randomly true or false – that is to say – true or false without any reason or explanation at all. Except for a few provable truths on a negligibly small island, all mathematical truths are merely contingently true. It's exactly this radical contingency of the mathematical realm that resembles the essence of the-world-in-itself on Meillassoux's speculative realism. For according to him the absolute *is* hyperchaos. But then it should come as no surprise that mathematics can be taken to be the language of the absolute. Chaitin's results thus reveal the true language of the *in itself*.

So, given that almost all mathematical truths are true for no reason al all, mathematics does indeed seem to be the proper science to describe reality as being a contingent hyperchaos. Here we appear to have the trajectory Meillassoux is looking for, i.e. a compelling rationale for his

⁶⁶ Chaitin 2002, 2006.

conjecture that mathematics, and mathematics alone, is the language of the absolute. The above line of reasoning seems to me the most promising pathway available to argue that mathematics reflects the absolute. But again, *only* if we for the sake of argument and wholly contrary to what I've shown, assume that the circle of correlation has been successfully broken by Meillassoux.

7. Closing Remarks

In this article I presented and refuted three arguments put forward by Meillassoux in his much discussed book *After Finitude* against the epistemic position he has coined *correlationism*. His three original arguments, that is, the argument from ancestrality, the argument from facticity, and the argument from the almost perfect mathematization of nature are interesting and thought provoking. Nevertheless, given that these best in class arguments do not succeed, correlationism stands unrefuted. The “codicil of modernity” is therefore still with us. Now, until and unless other more convincing objections are proposed by realists, the ‘for us’ remains inescapable.

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