The difficulty of distinguishing the genuine philosopher from the eloquent sophist is never more pressing than when someone comes forth and lays claim to a new paradigm for thinking. The uncertainty concerning the merit and depth of the discourse typically precipitates two types of responses, both aimed at settling the question of legitimacy once and for all. On the one hand, the enthusiasm of those who join ‘the movement’, convinced that they have found the genuine new philosopher. On the other hand, the cynicism of those who dismiss the emerging paradigm as a design to dazzle the young, convinced that the supposedly groundbreaking thinker is a sophist in disguise.

The work of Quentin Meillassoux seems destined to provoke these types of responses. Meillassoux himself is adamant that his work goes to the heart of classical metaphysical questions in order to answer them anew, and his former teacher Alain Badiou even holds that ‘Meillassoux has opened a new path in the history of philosophy’.¹ Judging from the rapidly growing interest in Meillassoux after the English translation of his first book After Finitude, and the announcement of the movement of ‘speculative realism’ in its wake, there are many who seem willing to subscribe to the truth of Badiou’s statement. Conversely, the apparently fashionable character of Meillassoux’s philosophy cannot but provoke suspicion among the already established, especially since Meillassoux situates himself polemically vis-à-vis all forms of transcendental philosophy and phenomenology.

Nevertheless, it would be a mistake to endorse either of these two attitudes to Meillassoux’s thinking. The considerable merit of his work is that it invites philosophical argumentation rather than reverence or dismissal. Hence, I will confront the logic of Meillassoux’s arguments with the logic I articulate in my book Radical Atheism. Parallels between After Finitude and Radical Atheism have already been noted. In a recent

essay, Aaron F. Hodges stages a confrontation between the two works in terms of the question of materialism, which is an instructive focal point for our respective trajectories.2 Both books criticize the prevalent ‘turn to religion’, in the course of reactivating fundamental questions of contingency and necessity, time and space, life and death. Returning to these questions here, I will not only seek to critically assess Meillassoux’s work and press home the stakes of radical atheism, but also to delineate the consequences of the debate for the notion of materialism.

Meillassoux targets nothing less than the basic argument of Kant’s transcendental philosophy, which holds that we cannot have knowledge of the absolute. Against all forms of dogmatic metaphysics which lay claim to prove the existence of the absolute, Kant argues that there can be no cognition without the forms of time and space that undercut any possible knowledge of the absolute. The absolute would have to be exempt from time and space, whereas all we can know is given through time and space as forms of intuition. As is well known, however, Kant delimits the possibility of knowledge in order to ‘make room for faith’. By making it impossible to prove the existence of the absolute Kant also makes it impossible to refute it and thus rehabilitates the absolute as an object of faith rather than knowledge.

In contrast, Meillassoux seeks to formulate a notion of the absolute that does not entail a return to the metaphysical and pre-critical idea of a necessary being. He endorses Kant’s critique of dogmatic metaphysics, but argues that we can develop a ‘speculative’ thinking of the absolute that does not succumb to positing a necessary being. According to Meillassoux, ‘it is absolutely necessary that every entity might not exist. This is indeed a speculative thesis, since we are thinking an absolute, but it is not metaphysical, since we are not thinking any thing (any entity) that would be absolute. The absolute is the absolute impossibility of a necessary being’.3 The absolute in question is the power of time. Time makes it impossible for any entity to be necessary, since the condition of temporality entails that every entity can be destroyed. It is precisely this destructibility that Meillassoux holds to be absolute: ‘only the time that harbours the capacity to destroy every determinate reality, while obeying no determinate law—the time capable of destroying, without reason or law, both words and things—can be thought as an absolute’ (62). Armed with this notion of the absolute, Meillassoux takes contemporary philosophers to task for their concessions to religion. By renunciing knowledge of the absolute, thinkers of the ‘wholly other’ renounce the power to refute religion and give the latter free reign as long as it restricts itself to the realm of faith rather than knowledge. As Meillassoux puts it with an emphatic formulation: ‘by forbidding reason any claim to the absolute, the end of metaphysics has taken the form of an exacerbated return of the religious’ (45).

Although Meillassoux rarely mentions him by name, Derrida is clearly one of the intended targets for his attack on the idea of a ‘wholly other’ beyond the grasp of reason. As I demonstrate in Radical Atheism, however, Derrida’s thinking of alterity cannot be aligned with any religious conception of the absolute.4 For Derrida, alterity is indis-

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3. Meillassoux, After Finitude, p. 60. Subsequent page-references given in the text.

sociable from the condition of temporality that exposes every instance to destruction. Consequently, Derrida’s notion of the ‘absolutely’ or ‘wholly’ other (tout autre) does not refer to the positive infinity of the divine but to the radical finitude of every other. Every finite other is absolutely other, not because it is absolutely in itself but, on the contrary, because it can never overcome the alterity of time and never be in itself. As long as it exists, every entity is always becoming other than itself and cannot have any integrity as such. Far from consolidating a religious instance that would be exempt from the destruction of time, Derrida’s conception of absolute alterity spells out that the subjection to the violent passage of time is absolutely irreducible.

Nevertheless, there are central and decisive differences between the conception of time proposed by Meillassoux and Derrida respectively. For Meillassoux, the absolute contingency of time (the fact that anything can happen) has an ontological status which entails that the advent of the divine is possible. Despite his critique of religion, Meillassoux advocates a divinology according to which God is possible, not because it is possible that God may currently exist but because it is possible that he may come to exist in the future. While this may seem to be Meillassoux’s weakest and most extravagant proposal, I will argue that it follows from fundamental problems in his theorization of time. For Meillassoux, absolute time is a ‘virtual power’ that only entails the possibility—and not the necessity—of destruction. Furthermore, the destructive effects of temporality that do take place can supposedly be reverted by the virtual power of contingency, which according to Meillassoux even allows for the possible resurrection of the dead. I will show that these arguments are untenable, since there can be no contingency without the succession of time, which entails irreversible destruction and rules out the possibility of resurrection a priori.

My argument has two steps. First, I demonstrate that the conception of time as dependent on the structure of ‘the trace’ provides a better model for thinking temporality and contingency than the one proposed by Meillassoux. Derrida defines the structure of the trace as the becoming-space of time and the becoming-time of space. I proceed by demonstrating how the structure of the trace can be deduced from the philosophical problem of succession. The structure of the trace entails what I call the ‘arche-materiality’ of time, which is crucial for thinking the relation between the animate and the inanimate, while undermining Meillassoux’s notion of the virtual power of time. Contrary to what Meillassoux holds, time cannot be a virtual power to make anything happen, since it is irreversible and dependent on a spatial, material support that restricts its possibilities. Second, I confront Meillassoux’s divinology with the logic of radical atheism. Radical atheism targets an axiom shared by both religion and traditional atheism, namely, that we desire the state of immortality. The radical atheist counter-argument is not only that immortality is impossible but also that it is not desirable in the first place. Through Meillassoux’s own examples, we will see that the purported desire for immortality in fact is motivated by a desire for mortal survival that precedes it and contradicts it from within. In clarifying the status of this desire for survival, I conclude by showing how it is crucial for radical atheist materialism.

Meillassoux’s point of departure is the empirical phenomenon of what he calls arche-fossils, namely, objects that are older than life on Earth and whose duration it is possible to measure: ‘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’ (10).

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Such arche-fossils enable scientists to date the origin of the universe to approximately 13.5 billion years ago and the origin of life on Earth to 3.5 billion years ago. According to Meillassoux, these ‘ancestral’ statements are incompatible with the basic presupposition of transcendental philosophy, which holds that the world cannot be described apart from how it is given to a thinking and/or living being. The ancestral statements of science describe a world in which nothing was given to a thinking or living being, since the physical conditions of the universe did not allow for the emergence of a life or consciousness to which the world could be given. The ensuing challenge to transcendental philosophy ‘is not the empirical problem of the birth of living organisms, but the ontological problem of the coming into being of givenness as such’ (21). Rather than being able to restrict time to a form of givenness for consciousness, we are confronted with an absolute time ‘wherein consciousness as well as conscious time have themselves emerged in time’ (21).

Meillassoux is well aware that he could here be accused of conflating the empirical with the transcendental. Empirical bodies emerge and perish in time, but the same cannot be said of transcendental conditions. The transcendental subject is not an empirical body existing in time and space, but a set of conditions through which knowledge of bodies in time and space is possible. Thus, a scientific discourse about empirical objects or the empirical universe cannot have purchase on the transcendental subject, since the latter provides the condition of possibility for scientific knowledge. In response to such an objection, Meillassoux grants that the transcendental subject does not exist in the way an object exists, but insists that the notion of a transcendental subject nevertheless entails that it must take place, since it ‘remains indissociable from the notion of a point of view’ (25). The transcendental subject—as both Kant and Husserl maintain—is essentially finite, since it never has access to the world as a totality but is dependent on receptivity, horizon, perceptual adumbration, and so on. It follows that although transcendental subjectivity is not reducible to an objectively existing body, it must be incarnated in a body in order to be what it is. Without the incarnation in a body there would be no receptivity, no limited perspective on the world, and hence no point of view. As Meillassoux puts it: ‘that the transcendental subject has this or that body is an empirical matter, but that it has a body is a non-empirical condition of its taking place’ (25). Consequently, when scientific discourse ‘temporalizes and spatializes the emergence of living bodies’ it also temporalizes and spatializes the basic condition for the taking place of the transcendental (25). 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’ (26). Far from confirming the transcendental relation between thinking and being as primordial, 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’ (10).

Despite highlighting the problem of succession, however, Meillassoux fails to think through its logical implications. Meillassoux argues that the principle of non-contradiction must be ‘an absolute ontological truth’ (71) for temporal becoming to be possible. If a contradictory entity existed, it could never become other than itself, since it would already contain its other within itself. If it is contradictory, it could never cease to be but would rather continue to be even in not-being. Consequently, the existence of
a contradictory entity is incompatible with temporal becoming; it would eliminate ‘the dimension of alterity required for the deployment of any process whatsoever, liquidating it in the formless being which must always already be what it is not’ (70). This argument is correct as far as it goes, but it does not consider that the same problem arises if we posit the existence of a non-contradictory entity. A non-contradictory entity would be indivisibly present in itself. Thus, it would remove precisely the ‘dimension of alterity’ that is required for becoming. Contrary to what Meillassoux holds, the movement of becoming cannot consist in the movement from one discreet entity to another, so that ‘things must be this, then other than this; they are, then they are not’ (70). For one moment to be succeeded by another—which is the minimal condition for any becoming whatsoever—it cannot first be present in itself and then be affected by its own disappearance. A self-present, indivisible moment could never even begin to give way to another moment, since what is indivisible cannot be altered. The succession of time requires not only that each moment be superseded by another moment, but also that this alteration be at work from the beginning. Every moment must negate itself and pass away in its very event. If the moment did not immediately negate itself there would be no time, only a presence forever remaining the same.

This argument—which I develop at length in Radical Atheism—does not entail that there is a contradictory entity that is able to contain its own non-being within itself. On the contrary, I argue that the constitution of time entails that there cannot be any entity (whether contradictory or non-contradictory) that contains itself within itself. The succession of time requires that nothing ever is in itself, but is always already subjected to the alteration and destruction that is involved in ceasing-to-be.

It follows that a temporal entity cannot be indivisible but depends on the structure of the trace. The trace is not itself an ontological entity but a logical structure that explains the becoming-space of time and the becoming-time of space. A compelling account of the trace therefore requires that we demonstrate the logical co-implication of space and time. The classical distinction between space and time is the distinction between simultaneity and succession. The spatial can remain the same, since the simultaneity of space allows one point to coexist with another. In contrast, the temporal can never remain the same, since the succession of time entails that every moment ceases to be as soon as it comes to be and thus negates itself. By the same token, however, it is clear that time is impossible without space. Time is nothing but negation, so in order to be anything it has to be spatialized. There is no ‘flow’ of time that is independent of spatialization, since time has to be spatialized in order to flow in the first place. Thus, everything we say about time (that it is ‘passing’, ‘flowing’, ‘in motion’ and so on) is a spatial metaphor. This is not a failure of language to capture pure time but follows from an originary becoming-space of time. The very concept of duration presupposes that something remains across an interval of time and only that which is spatial can remain. Inversely, without temporalization it would be impossible for a point to remain the same as itself or to exist at the same time as another point. The simultaneity of space is itself a temporal notion. Accordingly, for one point to be simultaneous with another point there must be an originary becoming-time of space that relates them to one another. The structure of the trace—as the co-implication of time and space—is therefore

6. See Derrida’s argument that ‘simultaneity can appear as such, can be simultaneity, that is a relating of two points, only in a synthesis, a complicity: temporally. One cannot say that a point is with another point, there cannot be an other point with which, etc., without a temporalization.’ Jacques Derrida, ‘Ousia and Grammè’, in Margins of Philosophy, trans. A. Bass, Chicago, University of Chicago Press, 1984, p. 55.
the condition for everything that is temporal. Everything that is subjected to succession is subjected to the trace, whether it is alive or not.

It is important to underline, however, that Derrida does not generalize the trace structure by way of an assertion about the nature of being as such. The trace is not an ontological stipulation but a logical structure that makes explicit what is implicit in the concept of succession. To insist on the logical status of the trace is not to oppose it to ontology, epistemology, or phenomenology, but to insist that the trace is a metatheoretical notion that elucidates what is entailed by a commitment to succession in either of these registers. The logical structure of the trace is expressive of any concept of succession—regardless of whether succession is understood in terms of an ontological, epistemological, or phenomenological account of time.

By the same token, one can make explicit that the structure of the trace is implicit in scientific accounts of how time is recorded in biological processes and material structures. For reasons that I will specify, the structure of the trace is implicit not only in the temporality of the living but also in the disintegration of inanimate matter (e.g. the ‘half-life’ of isotopes). The logic of the trace can thereby serve to elucidate philosophical stakes in the understanding of the relation between the living and the nonliving that has been handed down to us by modern science. I will here seek to develop this line of inquiry by demonstrating how the logic of the trace allows one to take into account the insights of Darwinism. Specifically, I will argue in favor of a conceptual distinction between life and nonliving matter that nevertheless asserts a continuity between the two in terms of what I call the ‘arche-materiality’ of time.8

The arche-materiality of time follows from the structure of the trace. Given that every temporal moment ceases to be as soon as it comes to be, it must be inscribed as a trace in order to be at all. The trace is necessarily spatial, since spatiality is characterized by the ability to persist in spite of temporal succession. Every temporal moment therefore depends on the material support of spatial inscription. Indeed, the material support of the trace is the condition for the synthesis of time, since it enables the past to be retained for the future. The material support of the trace, however, is itself temporal. Without temporalization a trace could not persist across time and relate the past to the future. Accordingly, the persistence of the trace cannot be the persistence of something that is exempt from the negativity of time. Rather, the trace is always left for an unpredictable future that gives it both the chance to live on and to be effaced.

The logical implications of the succession of time are directly relevant for the main argument in After Finitude, which seeks to establish the necessity of contingency.

7. I am grateful to Joshua Andresen, Ray Brassier, and Henry Staten for a set of incisive questions that forced me to clarify the status of ‘the trace’ in my argument. My understanding of the logical, rather than ontological, status of the trace is also indebted to conversations with Rocío Zambrana and to her work on Hegel’s Logic. See Rocío Zambrana, ‘Hegel’s Hyperbolic Formalism’, forthcoming in Bulletin of the Hegel Society of Great Britain, nos. 60/61.

8. Several respondents to Radical Atheism have pointed out that I equivocate between describing the structure of the trace as a general condition for everything that is temporal, and as a general condition for the living. The precise relation between the temporality of the living and the temporality of nonliving matter is thus left unclear in Radical Atheism. See Nathan Brown, ‘To Live Without an Idea’, Radical Philosophy, no. 154, pp. 51-53; William Egginton, ‘On Radical Atheism, Chronolobidinal Reading, and Impossible Desires’, CR: The New Centennial Review, vol. 9, no. 1, pp. 191-208; Samir Hadid, ‘Language Remains’, CR: The New Centennial Review, vol. 9, no. 1, pp. 127-146; and Aaron Hodges, ‘Martin Hägglund’s Speculative Materialism’, CR: The New Centennial Review, vol. 9, no. 1, pp. 87-106. I am grateful for these responses to my work, which have led me to elaborate how the relation between life and nonliving matter should be understood in terms of the logic of the trace.
cy. As Meillassoux formulates his guiding thesis: ‘Everything is possible, anything can happen—except something that is necessary, because it is the contingency of the entity that is necessary, not the entity’ (65). This notion of contingency presupposes succession, since there can be no contingency without the unpredictable passage from one moment to another. To establish the necessity of contingency, as Meillassoux seeks to do, is thus also to establish the necessity of succession.

Meillassoux himself, however, does not theorize the implications of succession, and this comes at a significant cost for his argument. In a recent essay, Aaron F. Hodges has suggested that Meillassoux’s critique of the principle of sufficient reason is potentially damaging for my notion of radical destructibility, which holds that everything that comes into being must pass away.9 In fact, however, it is rather my notion of radical destructibility that allows us to locate an inconsistency in Meillassoux’s argument. Let me quote in full the passage from Meillassoux to which Hodges calls attention:

To assert … that everything must necessarily perish, would be to assert a proposition that is still metaphysical. Granted, this thesis of the precariousness of everything would no longer claim that a determinate entity is necessary, but it would continue to maintain that a determinate situation is necessary, viz., the destruction of this or that. But this is still to obey the injunction of the principle of reason, according to which there is a necessary reason why this is the case (the eventual destruction of X), rather than otherwise (the endless persistence of X). But we do not see by virtue of what there would be a reason necessitating the possibility of destruction as opposed to the possibility of persistence. The unequivocal relinquishment of the principle of reason requires us to insist that both the destruction and the perpetual preservation of a determinate entity must equally be able to occur for no reason. Contingency is such that anything might happen, even nothing at all, so that what is, remains as it is. (62-63)

While emphasizing that a necessary entity is impossible, Meillassoux maintains that it is possible for nothing to happen, so that the entity remains as it is. As soon as we take into account the intrinsic link between contingency and succession, however, we can see that the latter argument is untenable. If nothing happened and the entity remained as it is, there would be no succession, but by the same token there would be no contingency. An entity to which nothing happens is inseparable from a necessary entity. In order to be subjected to succession—which is to say: in order to be contingent—the entity must begin to pass away as soon as it comes to be and can never remain as it is. Consequently, there is a reason that necessitates destruction, but it does not re-import the metaphysical principle of reason. On the contrary, it only makes explicit what is implicit in the principle of unreason that Meillassoux calls the necessity of contingency. Contingency presupposes succession and there is no succession without destruction. If the moment were not destroyed in being succeeded by another moment, their relation would not be one of succession but of co-existence. Thus, to assert the necessity of contingency is to assert the necessity of destruction.

For the same reason, Meillassoux’s opposition between destruction and persistence is misleading. Persistence itself presupposes an interval of time, which means that nothing can persist unscathed by succession. The destruction that is involved in succession makes any persistence dependent on the spacing of time, which inscribes what happens as a spatial trace that remains, while exposing it to erasure in an unpredictable future. The erasure of the spatial trace is indeed a possibility that is not immediate-

ly actualized, but it already presupposes the necessity of destruction that is operative in succession. Given that nothing can persist without succession, destruction is therefore at work in persistence itself.

Meillassoux’s response would presumably be that his notion of time does not depend on succession, but designates a ‘virtual power’ that may leave everything as it is or subject it to succession. To posit such a virtual power, however, is not to think the implications of time but to posit an instance that has power over time, since it may stop and start succession at will. In contrast, I argue that time is nothing in itself; it is nothing but the negativity that is intrinsic to succession. Time cannot, therefore, be a virtual power. Given that time is nothing but negativity, it does not have the power to be anything or do anything on its own. More precisely, according to my arche-materialist account, time cannot be anything or do anything without a spatialization that constrains the power of the virtual in making it dependent on material conditions.

We can clarify the stakes of this argument by considering the example of the emergence of life, which for Meillassoux is a ‘paradigmatic example’ of the virtual power of time.10 His way of formulating the problem, however, already reveals an anti-materialist bias. According to Meillassoux, ‘the same argumentative strategies are reproduced time and time again in philosophical polemics on the possibility of life emerging from inanimate matter’.

Since life manifestly supposes, at least at a certain degree of its evolution, the existence of a set of affective and perceptive contents, either one decides that matter already contained such subjectivity in some manner, in too weak a degree for it to be detected, or that these affections of the living being did not pre-exist in any way within matter, thus finding oneself constrained to admit their irruption ex nihilo from that matter—which seems to lead to the acceptance of an intervention transcending the power of nature. Either a ‘continualism’, a philosophy of immanence—a variant of hylozoism—which would have it that all matter is alive to some degree; or the belief in a transcendence exceeding the rational comprehension of natural processes.11

It is striking that a philosopher with Meillassoux’s considerable knowledge of science would present such an inadequate description of the actual debates about the emergence of life. A materialist account of the emergence of life is by no means obliged to hold that all matter is alive to some degree. On the contrary, such vitalism has been thoroughly debunked by Darwinism and its most prominent philosophical proponents. For example, what Daniel Dennett analyzes as Darwin’s dangerous idea is precisely the account of how life evolved out of nonliving matter and of how even the most advanced intentionality or sensibility originates in mindless repetition.12 Rather than vitalizing matter, philosophical Darwinism devitalizes life. For Meillassoux, however, life as subjective existence is something so special and unique that it requires an explanation that is refractory to materialist analysis.13 In Dennett’s language, Meillassoux thus refuses the ‘cranes’ of physical and biological explanation in favour of the ‘skyhook’ of a virtual power that would allow for the emergence of life ex nihilo.

To be sure, Meillassoux tries to distinguish his notion of irruption \textit{ex nihilo} from the theological notion of creation \textit{ex nihilo}, by maintaining that the former does not invoke any transcendence that would exceed rational comprehension but rather proceeds from the virtual power of contingency that Meillassoux seeks to formulate in rational terms. In both cases, however, there is the appeal to a power that is not limited by material constraints. Symptomatically, Meillassoux holds that ‘life furnished with sensibility’ emerges ‘\textit{directly} from a matter within which one cannot, short of sheer fantasy, foresee the germs of this sensibility’. As Meillassoux should know, this is nonsense from a scientific point of view. Life furnished with sensibility does not emerge directly from inanimate matter but evolves according to complex processes that are described in detail by evolutionary biology. If Meillassoux here disregards the evidence of science it is because he univocally privileges logical over material possibility. Contingency is for him the virtual power to make anything happen at any time, so that life furnished with sensibility can emerge without preceding material conditions that would make it possible. This idea of an irruption \textit{ex nihilo} does not have any explanatory purchase on the temporality of evolution, however, since it eliminates time in favour of a punctual instant. Even if we limit the notion of irruption \textit{ex nihilo} to a more modest claim, namely, that the beginning of the evolutionary process that led to sentient life was a contingent event that could not have been foreseen or predicted, there is still no need for Meillassoux’s concept of contingency as an unlimited virtual power to explain this event. Consider, for example, Dennett’s Darwinian argument concerning the origin of life:

We know as a matter of logic that there was at least one start that has us as its continuation, but there were probably many false starts that differed \textit{in no interesting way at all} from the one that initiated the winning series. The title of Adam is, once again, a retrospective honour, and we make a fundamental mistake of reasoning if we ask, \textit{In virtue of what essential difference} is this the beginning of life? There need be no difference at all between Adam and Badam, an atom-for-atom duplicate of Adam who just happened not to have found anything of note.

The beginning of life is here described as a contingent event, but notice that the contingency does not depend on a punctual event of irruption but on what happens successively. There is no virtual power that can determine an event to be the origin of life. On the contrary, which event will have been the origin of life is an effect of the succession of time that can never be reduced to an instant. Consequently, there is no need for Meillassoux’s skyhook of irruption \textit{ex nihilo} to explain the emergence of life. The emergence of life is certainly a contingent event, but this contingency cannot be equated with a power to make anything happen at any time. Rather, the emergence is dependent both on preceding material conditions that restrict what is possible and on succeeding events that determine whether it will have been the emergence of anything at all.

Thus, I want to argue that the notion of time as \textit{survival}—rather than as virtual power—is consistent with the insights of Darwinism. The logic of survival that I develop in \textit{Radical Atheism} allows us to pursue the consequences of the arche-materiality of time, as well as the general co-implication of persistence and destruction. If some-

\textsuperscript{14} Meillassoux, ‘Potentiality and Virtuality’, p. 232, my italics.

\textsuperscript{15} See also Peter Hallward’s astute observation that Meillassoux tends to treat ‘the logical and material domains as if they were effectively interchangeable’. Peter Hallward, ‘Anything is Possible’, in this volume.

\textsuperscript{16} Dennett, Darwin’s Dangerous Idea, p. 201.
thing survives it is never present in itself; it is already marked by the destruction of a past that is no longer while persisting for a future that is not yet. In its most elementary form, this movement of survival does not hinge on the emergence of life. For example, the isotope that has a rate of radioactive decay across billions of years is surviving—since it remains and disintegrates over time—but it is not alive.

Consequently, one can make explicit a continuity between the nonliving and the living in terms of the structure of the trace. The latter is implicit not only in our understanding of the temporality of living processes but also in our understanding of the disintegration of inanimate matter. On the one hand, the disintegration of matter answers to the becoming-time of space. The simultaneity of space in itself could never allow for the successive stages of a process of disintegration. For there to be successive disintegration, the negativity of time must be intrinsic to the positive existence of spatial matter. On the other hand, the disintegration of matter answers to the becoming-space of time. The succession of time could not even take place without material support, since it is nothing in itself and must be spatialized in order to be negative—that is, to negate anything—at all. The notion of arche-materiality thereby allows us to account for the minimal synthesis of time—namely, the minimal recording of temporal passage—without presupposing the advent or existence of life. The disintegration of matter records the passage of time without any animating principle, consciousness, or soul.

Accordingly, there is an asymmetry between the animate and the inanimate in the arche-materiality of the trace. As soon as there is life there is death, so there can be no animation without the inanimate, but the inverse argument does not hold. If there were animation as soon as there is inanimate matter, we would be advocating a vitalist conception of the universe, where life is the potential force or the teleological goal of existence. The conception of life that follows from the arche-materiality of the trace is as far as one can get from such vitalism, since it accounts for the utter contingency and destructibility of life. As Henry Staten formulates it in a recent essay: ‘the strong naturalist view, from which Derrida does not deviate, holds that matter organized in the right way brings forth life, but denies that life is somehow hidden in matter and just waiting to manifest itself …. Life is a possibility of materiality, not as a potential that it is ‘normal’ for materiality to bring forth, but as a vastly improbable possibility, by far the exception rather than the rule’.17

What difference is at stake, then, in the difference between the living and the nonliving? The radioactive isotope is indeed surviving, since it decays across billions of years, but it is indifferent to its own survival, since it is not alive. A living being, on the other hand, cannot be indifferent to its own survival. Survival is an unconditional condition for everything that is temporal, but only for a living being is the care for survival unconditional, since only a living being cares about maintaining itself across an interval of time. The care in question has nothing to do with a vital force that would be exempt from material conditions. Rather, the care for survival is implicit in the scientific definition of life as a form of organization that of necessity is both open and closed. On the one hand, the survival of life requires an open system, since the life of a given entity must be able to take in new material and replenish itself to make up for the breakdown of its own macromolecular structures. On the other hand, the survival of life requires a certain closure of the system, since a given entity must draw a boundary between it-

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self and others in order to sustain its own life. It follows that the care for survival is inextricable from the organization of life. Neither the openness to replenishment nor the closure of a boundary would have a function without the care to prevent a given life or reproductive line from being terminated.

The distinction between matter and life that I propose, however, is not meant to settle the empirical question of where to draw the line between the living and the nonliving. Rather, it is meant to clarify a conceptual distinction between matter and life that speaks to the philosophical stakes of the distinction. This conceptual distinction allows us to take into account the Darwinian explanation of how the living evolved out of the nonliving, while asserting a distinguishing characteristic of life that does not make any concessions to vitalism. The care for survival that on my account is coextensive with life does not have any power to finally transcend material constraints but is itself a contingent and destructible fact. Without care everything would be a matter of indifference and that is a possibility—there is nothing that necessitates the existence of living beings that care. The fact that every object of care—as well as care itself—is destructible does not make it insignificant but is, on the contrary, what makes it significant in the first place. It is because things are destructible, because they have not always been and will not always be, that anyone or anything cares about them. Far from depriving us of the source of vitality, it is precisely the radical destructibility of life that makes it a matter of care.

In Meillassoux, the problem of care emerges most clearly in his divinology, where he transitions from a speculative exposition of the conditions for being in general to an engagement with questions of death and resurrection, which by definition only matter to a being that cares about its own survival. By examining this transition, I will seek to press home the stakes of my argument and its consequences for a materialist thinking. Indeed, we will see how Meillassoux’s divinology allows us to assess both the ontological consequences of his attempt to separate the necessity of contingency from the necessity of destruction and the theological consequences of his conception of desire.

The point of departure for Meillassoux’s divinology is what he calls the spectral dilemma, which arises in response to ‘terrible deaths’ that one cannot accept. The victims of these deaths return as ‘spectres’ that haunt the living and preclude the achievement of an ‘essential mourning’ that would enable one to come to terms with what has happened. For Meillassoux, the main obstacle to achieving essential mourning is the forced alternative between a religious position that affirms the existence of God and an atheist position that denies the existence of God. According to Meillassoux, both of these positions are ‘paths to despair when confronted with spectres’.18

Meillassoux draws his conclusion by staging a dialogue between the two positions, recounting what he regards as the strongest responses to mourning by the religious apologist and the atheist respectively. For the religious apologist, ‘the idea that all justice is impossible for the innumerable massed spectres of the past corrodes my very core, so that I can no longer bear with the living …. I must hope for something for the dead also, or else life is vain. This something is another life, another chance to live—to live something other than that death which was theirs’ (264). The atheist in turn responds that this promise of justice in fact is a threat of the worst injustice, since ‘it would be done under the auspices of a God who had himself allowed the worst acts to be committed … who has let men, women and children die in the worst circumstances, when he could have saved them without any difficulty whatsoever … I prefer for them, as for

myself, nothingness, which will leave them in peace and conserve their dignity, rather than putting them at the mercy of the omnipotence of your pitiless Demiurge’ (264-65). This is, according to Meillassoux, the spectral dilemma: ‘either to despair of another life for the dead, or to despair of a God who has let such deaths take place’ (265).

While Meillassoux subscribes to neither of these positions, he retains an essential premise from each of them. On the one hand, Meillassoux retains the religious premise that the hope for justice requires the hope for a life beyond death. On the other hand, Meillassoux retains the atheist premise that the existence of God is an obstacle to the existence of justice, since the existence of God would mean that He has allowed terrible deaths. The key to resolving the spectral dilemma is thus, for Meillassoux, to find a third option that combines ‘the possible resurrection of the dead—the religious condition of the resolution—and the inexistence of God—the atheistic condition of the resolution’ (268). This third option hinges on what Meillassoux calls divine inexistence, which has two meanings. On the one hand, divine inexistence means that there is no God, no metaphysical Principle or Creator of the world. On the other hand, divine inexistence means that ‘what remains still in a virtual state in present reality harbors the possibility of a God still to come, become innocent of the disasters of the world, and in which one might anticipate the power to accord to spectres something other than their death’ (268, emphasis added). Accordingly, it is possible to hope for a God who does not yet exist—and hence is innocent of the atrocities of history—but who may come to exist in the future and resurrect the dead.

In proposing this resolution to the spectral dilemma, Meillassoux appeals to his argument that the laws of nature can change at any moment for no reason whatsoever. I will here not examine the details of this argument, which involves a lengthy treatment of Hume’s problem of causal necessity. Rather, my point is that, even if we grant Meillassoux’s argument about the contingency of the laws of nature, it cannot support his divinological thesis. As we have seen, the latter holds that a transformation of the laws of nature may allow a God to emerge and resurrect the dead. The contingency of the laws of nature would thus allow for the possibility of reversing the destructive effects of time. In fact, however, Meillassoux’s own account of time shows why such redemption of the past is not even possible in principle. As he emphasizes in After Finitude, the contingency of the laws of nature hinges on ‘the idea of a time that would be capable of bringing forth or abolishing everything’:

This is a time that cannot be conceived as having emerged or as being abolished except in time, which is to say, in itself. No doubt, this is a banal argument on the face of it: ‘it is impossible to think the disappearance of time unless this disappearance occurs in time; consequently, the latter must be conceived to be eternal’. But what people fail to notice is that this banal argument can only work by presupposing a time that is not banal—not just a time whose capacity for destroying everything is a function of laws, but a time which is capable of the lawless destruction of every physical law. It is perfectly possible to conceive of a time determined by the governance of fixed laws disappearing in something other than itself—it would disappear in another time governed by alternative laws. But only the time that harbors the capacity to destroy every determinate reality, while obeying no determinate law—the time capable of destroying, without reason or law, both worlds and things—can be thought as an absolute. (61-62)

It follows from this argument—even though Meillassoux does not acknowledge it—that the succession of time would not be abolished even if a set of natural laws were

19. See, in particular, chapter 3 of Meillassoux’s After Finitude, and his essay ‘Potentiality and Virtuality’.
abolished, since the former is the condition of possibility for any change or disappearance of natural laws. Contingency—no matter how absolute it may be—cannot redeem the destructive effects of time. Given that contingency presupposes succession, and that succession hinges on the destructive passage from one moment to another, there is only ever contingency at the price of destruction. The destruction in question is irreversible—and hence irredeemable—since what distinguishes temporal succession from spatial change is precisely that the former is irreversible.

My radical atheist argument, however, is not limited to a logical refutation of the possibility of redeeming temporal being; it is also directed at the assumption that such redemption is desirable. We can thereby approach the motivation for Meillassoux’s divinology, and read it against itself from within.

Recall that the spectral dilemma is essentially a problem of mourning, since it arises because one is unable to accept a terrible death. Now, if one did not care that a mortal being live on, one would have no trouble letting go and accepting death. The spectral dilemma that Meillassoux locates in the struggle for justice thus presupposes the care for survival. If one did not care for the survival of someone or something, there would be nothing that compelled one to fight for the memory of the past or for a better future. Indeed, without the care for survival one would never be haunted by the fate of the dead, since one would not care about anything that has happened or anything that may happen.

The constitutive care for survival allows us to read the so-called desire for immortality against itself. The desire to live on after death is not a desire for immortality, since to live on is to survive as a temporal being. The desire for survival cannot aim at transcending time, since temporality is intrinsic to the state of being that is desired. There is thus an internal contradiction in the purported desire for immortality. If one did not care for mortal life, one would not fear death and desire to live on. But for the same reason, the prospect of immortality cannot even hypothetically appease the fear of death or satisfy the desire to live on. Rather than redeeming death, the state of immortality would bring about death, since it would put an end to mortal life.

The distinction between survival and immortality is directly relevant for Meillassoux’s proposed solution to the spectral dilemma, according to which a god can emerge and resurrect the victims of terrible deaths. Meillassoux does not make clear whether the resurrection of the dead would entail immortality in the strict sense or whether it would allow the dead to simply live on as mortals. But even if we grant the latter alternative, we can see that it offers no solution to the spectral dilemma of mourning terrible deaths. If the dead are resurrected as they were at the time of death, they will come back as victims of severe trauma and still face the problem of how to mourn what happened to them. Alternatively, if the idea is to resurrect the dead without the memory of their terrible death, the problem of mourning is still not resolved but only cancelled out. The resurrected would not have to mourn that particular death, but in living on they could be subject to another terrible death, in which case a new inexistnet god would have to emerge and erase the memory of what happened.

These speculations may seem absurd, but they reveal that Meillassoux’s solution to the spectral dilemma would require the advent of immortality. If the world continues to be populated by mortal beings after the emergence of the inexistnet god, then nothing can prevent terrible deaths from occurring again and the new god will soon be guilty of having allowed them to happen. The only way to avoid this problem would be
to install a state of immortality that would not allow any terrible deaths to take place. As we have seen, however, the state of immortality cannot answer to the survival that is cared for and that motivates the struggle against the injustice of terrible deaths. On the contrary, the state of immortality would eliminate the ‘capacity-not-to-be’ and the ‘dimension of alterity’ that according to Meillassoux himself is necessary for the existence of any given being (see 58, 70). It follows that the state of immortality cannot satisfy the hope that is at the root of the spectral dilemma, namely, the hope that singular mortal beings will be given another chance to live. Far from providing another chance to live, the state of immortality would terminate life.

Following this logic of radical atheism, we can undermine the conception of desire that informs Meillassoux’s articulation of the spectral dilemma. According to Meillassoux, ‘the atheist is atheist because religion promises a fearful God; the believer anchors his faith in the refusal of a life devastated by the despair of terrible deaths’.20 Both the positions would thus be dictated by despair before the absence of divine justice and immortality. But in fact, we can see that both the atheist and the believer proceed from a radical atheist desire for survival, since their despair does not stem from the absence of God or immortality but from their care for the fate of mortal beings. Without such care there would be no struggle for justice in the first place. The mortality of life is not only an unavoidable necessity but also the reason why we care about anyone’s life at all and seek to combat the injustice of terrible deaths. Inversely, the state of immortality cannot satisfy the hope for ‘another life’ for the mortal beings that have passed away. Rather than allowing mortal beings to live on, the state of immortality would eliminate the possibility of life.

Both the hope for another life and the despair over terrible deaths are thus dictated by a desire for mortal survival, which entails that the problem of mourning cannot even in principle be resolved. Meillassoux’s mistake is to treat death and spectrality as something that can be removed without removing life itself. In contrast, the radical atheist argument is that spectrality is an indispensable feature of life in general. When I live on from one moment to another, I am already becoming a spectre for myself, haunted by who I was and who I will become. Of course, the loss that is inherent in this experience of survival is made much more palpable in the actual mourning of someone’s death, but it is operative on a minimal level in everything I experience, since it is inextricable from the mortal being that I am. If I survived wholly intact, I would not be surviving; I would be reposing in absolute presence. Thus, in living on as a mortal being there is always an experience of irrevocable loss, since the movement of survival necessarily entails the eradication of what does not survive.

The loss in question is not necessarily tragic. Depending on the content and the situation, one may want to welcome or resist, embrace or lament, the loss of the past. The point, however, is that one always has to reckon with it. Whatever one does, one is haunted by a past that is repressed or commemorated, and indeed often repressed precisely by being commemorated or vice versa. That is why there is always a process of mourning at work, as Derrida maintains in *Spectres of Marx*, and why one must always respond to the past by ‘burying’ the dead, either in the sense of forgetting or remembering.

The comparison with Derrida is instructive here, since he also treats the interconnection between spectrality and mourning, but in a radically different way than Meillassoux. For Derrida, the spectrality of mourning is not an affliction that ought to be

redeemed by divine intervention, but a constitutive double bind. On the one hand, mourning is an act of fidelity, since it stems from the attachment to a mortal other and from the desire to hold on to this mortal other. On the other hand, mourning is an act of infidelity, since one can only mourn if one has decided to live on without the other and thus leave him or her or it behind. This betrayal is certainly unavoidable—the only alternative to surviving the other is to kill oneself and thereby kill the memory of the other as well—but the violence of living on is nonetheless real. To live on, I cannot be absolutely faithful to the other, since I have to mobilize my ability to do without the other and in the process ‘kill’ my previous attachment to a greater or lesser degree. Thus, the survival of life necessarily engenders ghosts, since it must demarcate itself against a past that cannot be comprehended and a future that cannot be anticipated.

For Meillassoux, however, the spectrality of mourning is not a structural feature of life and can potentially be overcome by a miraculous event of redemption. This is a profoundly depoliticizing move, since it removes attention from the ways in which the problem of mourning is mediated historically, in favour of a general ‘resolution’ of the problem by divine intervention. The deconstructive notion of an irreducible spectrality is, on the contrary, a notion that politicizes the question of mourning all the way down. Such politicization does not consist in deriving a prescription for mourning from the deconstructive analysis. If a prescription were possible to derive from the deconstructive analysis, the question of mourning would once again be depoliticized, since there would be a criterion for addressing it that is exempt from political contestation and struggle. The hyperpolitical move of deconstruction is, on the contrary, to account for the irreducible necessity of politics as a historical and material praxis. Precisely because the work of mourning cannot operate without exclusion, and cannot justify these exclusions a priori, it will always be necessary to evaluate their effects on a historical and material level.

Accordingly, Derrida’s ‘hauntological’ analysis does not seek to resolve the problem of mourning, but to account for why the work of mourning will always have to reckon with discrimination. As Derrida argues in Spectres of Marx, any act of mourning, any watch over the dead that seeks to remember what has been excluded, ‘will fatally exclude in its turn’:

It will even annihilate, by watching (over) its ancestors rather than (over) certain others. At this moment rather than at some other moment. By forgetfulness (guilty or not, it matters little here), by foreclosure or murder, this watch itself will engender new ghosts. It will do so by choosing already among the ghosts, its own from among its own, thus by killing the dead: law of finitude, law of decision and responsibility for finite existences, the only living-mortals for whom a decision, a choice, a responsibility has meaning and a meaning that will have to pass through the ordeal of the undecidable.21

What Derrida here calls the ‘law of finitude’ is not something that one can accept or refuse, since it precedes every decision and exceeds all mastery. There can be no taking of responsibility and no making of decisions without the temporal finitude of survival, which always entails a violent discrimination. The experience of survival—here figured as the burial of the dead—is thus what raises the concern for justice in the first place. If life were fully present to itself, if it were not haunted by what has been lost in the past and what may be lost in the future, there would be nothing that could cause

the concern for justice. Indeed, justice can only be brought about by ‘living-mortals’ who will exclude and annihilate by maintaining the memory and life of certain others at the expense of other others.

For Meillassoux, however, the desired state of being is a community that would prevail beyond violence. Following a pious logic, he ends his essay on the spectral dilemma with the hope for a god that would be ‘desirable, lovable, worthy of imitation’ and who would make us participate in ‘a becalmed community of living, of dead, and of reborn’ (275). The radical atheist argument is not simply that such a peaceful state of being is impossible to actualize, as if it were a desirable, albeit unattainable end. Rather, the logic of radical atheism challenges the very idea that it is desirable to overcome violence and spectrality. A completely reconciled life—which would not be haunted by any ghosts—would be nothing but complete death, since it would eliminate every trace of survival. In pursuing this argument, radical atheism does not seek to repudiate but to re-describe the hope that animates the struggle against the injustice of terrible deaths. The struggle for justice and the hope for another life have never been driven by a desire to transcend temporal finitude but by a desire for mortal survival.

Schematically, then, radical atheist materialism can be said to have two major consequences. First, it establishes the arche-materiality of time, in distinction from all idealist or speculative attempts to privilege temporality over spatiality. The constitutive negativity of time immediately requires a spatial, material support that retains the past for the future. The virtual possibilities of temporality are therefore always already restricted by the very constitution of time, since the material support necessarily places conditions on what is possible. Contrary to what Meillassoux holds, the contingency of time cannot be a pure virtuality that has the power to make anything happen. The spatiality of material support is the condition for there to be temporality—and hence the possibility of unpredictable events through the negation of the present—but it also closes off certain possibilities in favour of others. Second, the necessity of discrimination and material support allows for a hyperpolitical logic. Given that the contingency of time cannot be a pure virtuality, but is itself dependent on material support, there can be no line of flight from the exigencies of the actual world and its particular demands. Furthermore, the conception of desire that informs radical atheism is in fact indispensable for a materialist analysis of social struggle. If we argue that social struggles are not in fact concerned with the religious end they profess but rather with material injustice—that is, if we politicize social struggles—we presuppose the radical atheist conception of desire, according to which struggles for justice are not concerned with transcending the world but rather with survival. Rather than a priori dismissing struggles that are fought in the name of religious ideals as deluded, the logic of radical atheism allows us to see that these struggles, too, are a matter of survival and thus essentially material in their aims.

Whether a given struggle for survival should be supported or resisted is a different question, and one that only can be settled through an actual engagement with the world rather than through an analysis of its hauntological condition. Everything thus remains to be done, and what should be done cannot be settled on the basis of radical atheism. Rather, the logic of radical atheism seeks to articulate why everything remains to be done, by refuting the untenable hope of redemption and recalling us to the material base of time, desire, and politics.