After Finitude
An Essay on the Necessity of Contingency

quentin meillassoux
AFTER FINITUDE

An Essay on the Necessity of Contingency

Quentin Meillassoux  2008
Tr. Ray Brassier
With a Preface by Alain Badiou
Preface

Chapter 1 Ancestrality

Chapter 2 Metaphysics, Fideism, Speculation

Chapter 3 The Principle of Factiality

Chapter 4 Hume’s Problem

Chapter 5 Ptolemy's Revenge

Bibliography
Preface

I

The purpose of the series 'The Philosophical Order' is not only to publish mature and accomplished works of contemporary philosophy, or indispensable philosophical documents from every era, but also essays in which it is possible to detect the sense of something new — texts which respond to the question: 'What wound was I seeking to heal, what thorn was I seeking to draw from the flesh of existence when I became what is called "a philosopher"?' It may be that, as Bergson maintained, a philosopher only ever develops one idea. In any case, there is no doubt that the philosopher is born of a single question, the question which arises at the intersection of thought and life at a given moment in the philosopher's youth; the question which one must at all costs find a way to answer. This is the category to which we must assign this book by Quentin Meillassoux.

II

This brief essay, which is a fragment from a particularly important philosophical (or 'speculative', to use the author's own vocabulary) enterprise, returns to the root of the problem which provided the impetus for Kant's critical philosophy; the problem which, through the solution which Kant proposed, can be said to have broken the history of thought in two. This problem, which Hume formulated most clearly, pertains to the necessity of the laws of nature. From whence does this putative necessity arise,

---

1 'The Philosophical Order' (L'ordre philosophique) is the name of the series co-edited by Badiou in which this book was first published in France by Editions du Seuil (translator).
given that perceptual experience, which is the source of everything we know or think we know about the world, provides no guarantee whatsoever for it?

Kant’s response, as we know, grants to Hume that everything we know comes from experience. Yet Kant upholds the necessity of the laws of nature, whose mathematical form and conformity to empirical observation we have known since Newton, concluding that since this necessity cannot have arisen from our sensible receptivity, it must have another source: that of the constituting activity of a universal subject, which Kant calls ‘the transcendental subject’. This distinction between empirical receptivity and transcendental constitution appears to be the obligatory framework for all modern thought, and in particular for every attempt to think the nature of ‘modalities’, such as necessity or contingency. The latter continue to be the objects of Deleuze’s or Foucault’s reflections. But they also underlie the distinction, which is fundamental for Carnap and the analytic tradition, between formal and empirical sciences.

Quentin Meillassoux demonstrates with astonishing force how another interpretation of Hume’s problem - one which has remained occluded, even though it is more ‘natural’ - leads to a completely different resolution. Like Kant, Meillassoux saves necessity, including logical necessity. But like Hume, he grants that there is no acceptable ground for the necessity of the laws of nature.

Meillassoux’s proof - for it is indeed a proof - demonstrates that there is only one thing that is absolutely necessary: that the laws of nature are contingent. This entirely novel connection
between contrary modalities puts thought in a wholly other relation to the experience of the world; a relation which simultaneously undoes the ‘necessitarian’ pretensions of classical metaphysics as well as the ‘critical’ distribution of the empirical and the transcendental.

Quentin Meillassoux then goes on to draw some of the consequences of his resumption of the fundamental problem (‘what can I know?’) towards two other problems: ‘what must I do?’ and ‘what can I hope?’ It is there that what lies beyond finitude is deployed for contemporary thinkers.

It would be no exaggeration to say that Quentin Meillassoux has opened up a new path in the history of philosophy, hitherto conceived as the history of what it is to know; a path that circumvents Kant’s canonical distinction between ‘dogmatism’, ‘scepticism’ and ‘critique’. Yes, there is absolute logical necessity. Yes, there is radical contingency. Yes, we can think what there is, and this thinking in no way depends upon a supposedly constituting subject.

This remarkable ‘critique of Critique’ is presented here without embellishment, cutting straight to the heart of the matter in a particularly lucid and argumentative style. It allows thought to be destined towards the absolute once more, rather than towards those partial fragments and relations in which we complacently luxuriate while the ‘return of the religious’ provides us with a fictitious supplement of spirituality.

- Alain Badiou
Chapter 1 Ancestrality

The theory of primary and secondary qualities seems to belong to an irremediably obsolete philosophical past. It is time it was rehabilitated. For the contemporary reader, such a distinction might appear to be a piece of scholastic sophistry, devoid of any fundamental philosophical import. Yet as we shall see, what is at stake in it is the nature of thought’s relation to the absolute.

First of all, what does it consist in? The terms ‘primary quality’ and ‘secondary quality’ come from Locke, but the basis for the distinction can already be found in Descartes. When I burn myself on a candle, I spontaneously take the sensation of burning to be in my finger, not in the candle. I do not touch a pain that would be present in the flame like one of its properties: the brazier does not burn itself when it burns. But what we say of affections must likewise be said of sensations: the flavour of food is not savoured by the food itself and hence does not exist in the latter prior to its ingestion. Similarly, the melodious beauty of a...

7 Among the principal texts discussing this distinction we should mention Renee Descartes (1985a), Meditations on First Philosophy in J. Cottingham, R. Stoothoff, D. Murdoch (eds), The Philosophical Writings of Descartes. Vol. II (Cambridge: Cambridge University Press), Sixth Meditation; and Descartes (1985b), The Principles of Philosophy in The Philosophical Writings of Descartes. Vol. I, J. Cottingham, R. Stoothoff, D. Murdoch (eds) (Cambridge: Cambridge University Press), Second Part; John Locke (1979), An Essay Concerning Human Understanding (Oxford: Clarendon Press), ch. 8. It goes without saying that Descartes and Locke do not understand this distinction in the same way, but we will focus here on a sense that seems to be common to both.
sonic sequence is not heard by the melody, the luminous colour of a painting is not seen by the coloured pigment of the canvas, and so on. In short, nothing sensible - whether it be an affective or perceptual quality - can exist in the way it is given to me in the thing by itself, when it is not related to me or to any other living creature. When one thinks about this thing 'in itself, i.e. independently of its relation to me, it seems that none of these qualities can exist. Remove the observer, and the world becomes devoid of these sonorous, visual, olfactory, etc., qualities, just as the flame becomes devoid of pain once the finger is removed.

Yet one cannot maintain that the sensible is injected by me into things like some sort of perpetual and arbitrary hallucination. For there is indeed a constant link between real things and their sensations: if there were no thing capable of giving rise to the sensation of redness, there would be no perception of a red thing; if there were no real fire, there would be no sensation of burning. But it makes no sense to say that the redness or the heat can exist as qualities just as well without me as with me: without the perception of redness, there is no red thing; without the sensation of heat, there is no heat. Whether it be affective or perceptual, the sensible only exists as a relation: a relation between the world and the living creature I am. In actuality, the sensible is neither simply 'in me' in the manner of a dream, nor simply 'in the thing' in the manner of an intrinsic property: it is the very relation between the thing and I. These sensible qualities, which are not in the things themselves but in my subjective relation to the latter - these qualities correspond to what were traditionally called secondary qualities.
Yet it is not these secondary qualities that discredited the traditional theory of qualities. That it makes no sense to attribute to the 'thing in itself' (which is basically the 'thing without me') those properties which can only come about as a result of the relation between the thing and its subjective apprehension has effectively become a commonplace which few philosophers have contested. What has been vigorously contested, in the wake of phenomenology, is the way in which Descartes or Locke conceived of such a relation: as a modification of thinking substance tied to the mechanical workings of a material body, rather than, for instance, as a noetico-noematic correlation. But it is not a question of taking up once more the traditional conception of the constitutive relation of sensibility: all that matters for us here is that the sensible is a relation, rather than a property inherent in the thing. From this point of view, it is not particularly difficult for a contemporary philosopher to agree with Descartes or Locke.

This ceases to be the case as soon as one brings into play the core of the traditional theory of properties, viz., that there are two types of property. For what decisively discredited the distinction between primary and secondary qualities is the very idea of such a distinction: i.e. the assumption that the 'subjectivation' of sensible properties (the emphasis on their essential link to the presence of a subject) could be restricted to the object's sensible determinations, rather than extended to all its conceivable properties. By 'primary qualities', one understands properties which are supposed to be inseparable from the object, properties which one supposes to belong to the thing even when I no longer apprehend it. They are properties of the thing as it is without me,
as much as it is with me - properties of the in-itself. In what do they consist? For Descartes, they are all of those properties which pertain to extension and which are therefore subject to geometrical proof: length, width, movement, depth, figure, size. For our part, we will avoid invoking the notion of extension, since the latter is indissociable from sensible representation: one cannot imagine an extension which would not be coloured, and hence which would not be associated with a secondary quality. In order to reactivate the Cartesian thesis in contemporary terms, and in order to state it in the same terms in which we intend to uphold it, we shall therefore maintain the following: all those aspects of the object that can be formulated in mathematical terms can be meaningfully conceived as properties of the object in itself. All those aspects of the object that can give rise to a mathematical thought (to a formula or to digitalization) rather than to a perception or sensation can be meaningfully turned into properties of the thing not only as it is with me, but also as it is without me.

The thesis we are defending is therefore twofold: on the one hand, we acknowledge that the sensible only exists as a subject’s relation to the world; but on the other hand, we maintain that the mathematizable properties of the object are exempt from the constraint of such a relation, and that they are effectively in the object in the way in which I conceive them, whether I am in relation with this object or not. But before we proceed to justify this thesis, it is necessary to understand in what regard it may seem absurd to a contemporary philosopher - and to root out the

---

3 For reasons that we cannot examine here, Locke will add ‘solidity’ to this list.
precise source of this apparent absurdity.

The reason why this thesis is almost certain to appear insupportable to a contemporary philosopher is because it is resolutely pre-critical - it seems to represent a regression to the 'naive' stance of dogmatic metaphysics. For what we have just claimed is that thought is capable of discriminating between those properties of the world which are a function of our relation to it, and those properties of the world as it is 'in itself, subsisting indifferently of our relation to it. But we all know that such a thesis has become indefensible, and this not only since Kant, but even since Berkeley. It is an indefensible thesis because thought cannot get outside itself in order to compare the world as it is 'in itself to the world as it is 'for us', and thereby distinguish what is a function of our relation to the world from what belongs to the world alone. Such an enterprise is effectively self-contradictory, for at the very moment when we think of a property as belonging to the world in itself, it is precisely the latter that we are thinking, and consequently this property is revealed to be essentially tied to our thinking about the world. We cannot represent the 'in itself without it becoming 'for us', or as Hegel amusingly put it, we cannot 'creep up on' the object 'from behind' so as to find out what it is in itself - which means that we cannot know anything that would be beyond our relation to the world. Consequently,

---


the mathematical properties of the object cannot be exempted from the subjectivation that is the precondition for secondary properties: they too must be conceived as dependent upon the subject’s relation to the given - as a form of representation for the orthodox Kantian, or as an act of subjectivity for the phenomenologist, or as a specific formal language for the analytical philosopher, and so on. But in every case, any philosopher who acknowledges the legitimacy of the transcendental revolution - any philosopher who sees himself as ‘post-critical’ rather than as a dogmatist - will maintain that it is naive to think we are able to think something - even if it be a mathematical determination of the object - while abstracting from the fact that it is invariably we who are thinking that something.

Let us note - for we will have occasion to return to this point - that the transcendental revolution consisted not only in disqualifying the naive realism of dogmatic metaphysics (for Berkeley’s subjective idealism had already accomplished this), but also and above all in redefining objectivity outside of the dogmatic context. In the Kantian framework, a statement’s conformity to the object can no longer be defined in terms of a representation’s ‘adequation’ or ‘resemblance’ to an object supposedly subsisting ‘in itself, since this ‘in itself is inaccessible. The difference between an objective representation (such as ‘the sun heats the stone’) and a ‘merely subjective’ representation (such as ‘the room seems warm to me’) is therefore a function of the difference between two types of subjective representation: those that can be universalized, and are thus by right capable of being experienced by everyone, and hence ‘scientific’, and those that cannot be universalized, and hence cannot belong to
scientific discourse. From this point on, *intersubjectivity*, the consensus of a community, supplants the *adequation* between the representations of a solitary subject and the thing itself as the veritable criterion of objectivity, and of scientific objectivity more particularly. Scientific truth is no longer what conforms to an in-itself supposedly indifferent to the way in which it is given to the subject, but rather what is susceptible of being given as shared by a scientific community.

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

Let us examine more closely the meaning of such a philosopheme: ‘correlation, correlationism’.

Correlationism consists in disqualifying the claim that it is possible to consider the realms of subjectivity and objectivity independently of one another. Not only does it become necessary to insist that we never grasp an object 'in itself, in isolation from its relation to the subject, but it also becomes necessary to maintain that we can never grasp a subject that would not always already be related to an object. If one calls ‘the correlationist circle’ the argument according to which one cannot think the in-
itself without entering into a vicious circle, thereby immediately contradicting oneself, one could call 'the correlationist two-step' this other type of reasoning to which philosophers have become so well accustomed - the kind of reasoning which one encounters so frequently in contemporary works and which insists that it would be naı́ve to think of the subject and the object as two separately subsisting entities whose relation is only subsequently added to them. On the contrary, the relation is in some sense primary: the world is only world insofar as it appears to me as world, and the self is only self insofar as it is face to face with the world, that for whom the world discloses itself [...].

Generally speaking, the modern philosopher's 'two-step' consists in this belief in the primacy of the relation over the related terms; a belief in the constitutive power of reciprocal relation. The 'co-' (of co-givenness, of co-relation, of the co-originary, 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. Prior to the advent of transcendentalism, one of the questions that divided rival philosophers most decisively was 'Who grasps the true nature of substance? He who thinks the Idea, the individual, the atom, God? Which God?' But ever since Kant, to discover what divides rival philosophers is no longer to ask who has grasped the true nature of substance.

---

nature of substantiality, but rather to 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. Francis Wolff has very accurately described consciousness and language as 'object-worlds'. They are in fact unique objects insofar as they 'make the world'. And if these objects make the world, this is because from their perspective 'everything is inside' but at the same time 'everything is outside ...' Wolff continues:

Everything is inside because in order to think anything whatsoever, it is necessary to 'be able to be conscious of it', it is necessary to say it, and so we are locked up in language or in consciousness without being able to get out. In this sense, they have no outside. But in another sense, they are entirely turned towards the outside; they are the world's window: for to be conscious is always to be conscious of something, to speak is necessarily to speak about something. To be conscious of the tree is to be conscious of the tree itself, and not the idea of the tree; to speak about the tree is not just to utter a word but to speak about the thing. Consequently, consciousness and language enclose the

---

What is remarkable about this description of the modern philosophical conception of consciousness and language is the way in which it exhibits the paradoxical nature of correlational exteriority: on the one hand, correlationism readily insists upon the fact that consciousness, like language, enjoys an originary connection to a radical exteriority (exemplified by phenomenological consciousness transcending or as Sartre puts it 'exploding' towards the world); yet on the other hand this insistence seems to dissimulate a strange feeling of imprisonment or enclosure within this very exteriority (the 'transparent cage'). For we are well and truly imprisoned within this outside proper to language and consciousness given that we are already in it (the 'always already' accompanying the 'co-' of correlationism as its other essential locution), and given that we have no access to any vantage point from whence we could observe these 'object-worlds', which are the unsurpassable providers of all exteriority, from the outside. But if this outside seems to us to be a cloistered outside, an outside in which one may legitimately feel incarcerated, this is because in actuality such an outside is entirely relative, since it is - and this is precisely the point - relative to us. Consciousness and its language certainly transcend themselves towards the world, but there is a world only insofar as a consciousness transcends itself towards it. Consequently, this

---

8 Wolff (1997), pp. 11-12.
space of exteriority is merely the space of what faces us, of what exists only as a correlate of our own existence. This is why, in actuality, we do not transcend ourselves very much by plunging into such a world, for all we are doing is exploring the two faces of what remains a face to face - like a coin which only knows its own obverse. And if contemporary philosophers insist so adamantly that thought is entirely oriented towards the outside, this could be because of their failure to come to terms with a bereavement - the denial of a loss concomitant with the abandonment of dogmatism. For it could be that contemporary philosophers have lost the great outdoors, the absolute outside of pre-critical thinkers: that outside which was not relative to us, and which was given as indifferent to its own givenness to be what it is, existing in itself regardless of whether we are thinking of it or not; that outside which thought could explore with the legitimate feeling of being on foreign territory - of being entirely elsewhere.

Finally, in order to round off this brief exposition of the post-critical philosopheme, we must emphasize that the correlation between thought and being is not reducible to the correlation between subject and object. In other words, the fact that correlation dominates contemporary philosophy in no way implies the dominance of philosophies of representation. It is possible to criticize the latter in the name of a more originary correlation between thought and being. And in fact, the critiques of representation have not signalled a break with correlation, i.e. a simple return to dogmatism.

On this point, let us confine ourselves to giving one example: that of Heidegger. On the one hand, for Heidegger, it is certainly a case of pinpointing the occlusion of being or presence inherent
in every metaphysical conception of representation and the privileging of the present at-hand entity considered as object. Yet on the other hand, to think such an occlusion at the heart of the unconcealment of the entity requires, for Heidegger, that one take into account the *co-proprigation* (Zusammengehörigkeit) of man and being, which he calls *Ereignis*.

Thus, the notion of *Ereignis*, which is central in the later Heidegger, remains faithful to the correlationist exigency inherited from Kant and continued in Husserlian phenomenology, for the 'co-proprigation' which constitutes *Ereignis* means that neither being nor man can be posited as subsisting 'in-themselves', and subsequently entering into relation - on the contrary, both terms of the appropriation are originarily constituted through their reciprocal relation: 'The appropriation appropriates man and Being to their essential togetherness.' And the ensuing passage clearly exhibits Heidegger's strict observance of the correlationist 'two-step':

We always say *too little* of 'being itself when, in saying 'being', we omit its essential presencing *in the direction* of the human essence and thereby fail to see that this essence itself is part of 'being'. We also say *too little* of the human being when, in saying 'being' (not being human) we posit the human being as

---

10 Heidegger (1969), 38. Heidegger insists that the 'co-' (zusammen) in the term 'co-proprigation' should be understood on the basis of belonging, rather than belonging being understood on the basis of the 'co-'. But this is simply a matter of avoiding the metaphysical understanding of the unity of thought and being as nexus or connexio, and the submission of everything to the order of the system. Thus it is not a question of abandoning the 'co-', but of rethinking its originary nature beyond the schemas of representation. On this point, see Heidegger (1969), pp. 29-33.
independent and then first bring what we have thus posited into a relation to 'being'.

At this stage, we can begin to take stock of the number of decisions that it behoves every philosopher to uphold - whatever the extent of her break with modernity - should she not wish to regress to a merely dogmatic position: the correlationist circle and two-step; the replacement of adequation by intersubjectivity in the redefinition of scientific objectivity; the maintaining of the correlation even in the critique of representation; the cloistered outside. These postulates characterize every 'post-critical' philosophy, i.e. every philosophy that sees itself as sufficiently faithful to Kantianism not to want to return to pre-critical metaphysics.

It is with all these decisions that we are breaking when we maintain the existence of primary qualities. Are we then bent on deliberately regressing back to dogmatism? Moreover, what is it that incites us to break with the circle of correlation?

***

It’s just a line. It can have different shades, a little like a spectrum of colours separated by short vertical dashes. Above these are numbers indicating immense quantities. It’s a line the like of which one finds in any work of scientific popularization. The numbers designate dates and these dates are principally the following:

---

• the date of the origin of the universe (13.5 billion years ago)
• the date of the accretion of the earth (4.56 billion years ago)
• the date of origin of life on earth (3.5 billion years ago)
• the date of the origin of humankind (Homo habilis, 2 million years ago)

Empirical science is today capable of producing statements about events anterior to the advent of life as well as consciousness. These statements consist in the dating of 'objects' that are sometimes older than any form of life on earth. These dating procedures were called 'relative' so long as they pertained to the positions of fossils relative to one another (they were arrived at mainly by studying the relative depths of the geological strata from which the fossils were excavated). Dating became 'absolute' with the perfection of techniques (basically in the 1930s) that allowed scientists to determine the actual duration of the measured objects. These techniques generally rely upon the constant rate of disintegration of radioactive nuclei, as well as upon the laws of thermoluminescence - the latter permitting the application of dating techniques to the light emitted by stars.12

---

Thus contemporary science is in a position to precisely determine -albeit in the form of revisable hypotheses - the dates of the formation of the fossils of creatures living prior to the emergence of the first hominids, the date of the accretion of the earth, the date of the formation of stars, and even the ‘age’ of the universe itself.

The question that interests us here is then the following: *what is it exactly that astrophysicists, geologists, or paleontologists are talking about when they discuss the age of the universe, the date of the accretion of the earth, the date of the appearance of pre-human species, or the date of the emergence of humanity itself? 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? How is science able to think such statements, and in what sense can we eventually ascribe truth to them?*

Let us define our terms:

- I will call ‘ancestral’ any reality anterior to the emergence of the human species - or even anterior to every recognized form of life on earth.

*Principes, generalites’ ['Principles and Generalities'], and ch. IX (G. Lalou and G. Valados: Thermoluminescence').
I will call ‘arche-fossil’ or ‘fossil-matter’ not just materials indicating the traces of past life, according to the familiar sense of the term ‘fossil’, but materials indicating the existence of an ancestral reality or event; one that is anterior to terrestrial life. An arche-fossil thus designates the material support on the basis of which the experiments that yield estimates of ancestral phenomena proceed - for example, an isotope whose rate of radioactive decay we know, or the luminous emission of a star that informs us as to the date of its formation.

Let us proceed then from this simple observation: today’s science formulates a certain number of ancestral statements bearing upon the age of the universe, the formation of stars, or the accretion of the earth. Obviously it is not part of our remit to appraise the reliability of the techniques employed in order to formulate such statements. What we are interested in, however, is understanding under what conditions these statements are meaningful. More precisely, we ask: how is correlationism liable to interpret these ancestral statements?

We need to introduce a distinction at this point. There are in fact two basic types of correlationist thought, just as there are two basic types of idealism. For the correlation can be posited as unsurpassable either from a transcendental (and/or phenomenological) perspective, or a speculative one. It is possible to maintain the thesis according to which all that we can ever apprehend are correlates, or the thesis according to which the correlation as such is eternal. In the latter case, which is that of the hypothesis of the correlation, we are no longer dealing with
correlationism in the strict sense of the term, but with a
metaphysics that eternalizes the Self or the Mind, turning the
latter into the perennial mirror for the manifestation of the entity.
From the latter perspective, the ancestral statement presents no
particular difficulty: the metaphysician who upholds the eternal-
correlate can point to the existence of an 'ancestral witness', an
attentive God, who turns every event into a phenomenon,
something that is 'given-to', whether this event be the accretion of
the earth or even the origin of the universe. But 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. We do not know of any correlation
that would be given elsewhere than in human beings, and we
cannot get out of our own skins to discover whether it might be
possible for such a disincarnation of the correlation to be true.
Consequently, the hypothesis of the ancestral witness is
illegitimate from the viewpoint of a strict correlationism. Thus
the question we raised can be reformulated as follows: once one
has situated oneself in the midst of the correlation, while refusing
its hypostatization, how is one to interpret an ancestral statement?

Let us remark first of all that the meaning of ancestral
statements presents no problem for a dogmatic philosophy such
as Cartesianism. Consider what an ancestral event would mean
for a physicist familiar with the Meditations. She would begin
with the following observation: in the case of an event occurring
prior to the emergence of life on earth, such as the accretion of the earth (i.e. the era of the accumulation of matter which gave rise to the formation of our planet), it makes no sense to say that ‘it was hot then’, or that the light was ‘blinding’, or to make any other subjective judgements of this type. Since we do not know of any observer who was there to experience the accretion of the earth - and since we do not even see how a living observer would have been able to survive had she experienced such heat - all that can be formulated about such an event is what the 'measurements', that is to say, the mathematical data, allow us to determine: for instance, that it began roughly 4.56 billion years ago, that it did not occur in a single instant but took place over millions of years - more precisely, tens of millions of years - that it occupied a certain volume in space, a volume which varied through time, etc. Accordingly, it would be necessary to insist that it makes no sense to claim that those qualities that occur whenever a living creature is present - such as colour (rather than wavelength), heat (rather than temperature), smell (rather than chemical reactions), etc. - that those secondary qualities were present at the moment of the accretion of the earth. For these qualities represent the modes of relation between a living creature and its environment! and cannot be relevant when it comes to describing an event that is not only anterior to every recognized form of life but incompatible with the existence of living creatures. Consequently, our Cartesian physicist will maintain that those statements about the accretion of the earth which can be mathematically formulated designate actual properties of the event in question (such as its date, its duration, its extension), even when there was no observer present to experience it directly.
In doing so, our physicist is defending a Cartesian thesis about matter, but not, it is important to note, a Pythagorean one: the claim is not that the being of accretion is inherently mathematical - that the numbers or equations deployed in the ancestral statements exist in themselves. For it would then be necessary to say that accretion is a reality every bit as ideal as that of number or of an equation. Generally speaking, statements are ideal insofar as their reality is one of signification. But their referents, for their part, are not necessarily ideal (the cat is on the mat is real, even though the statement ‘the cat is on the mat’ is ideal). In this particular instance, it would be necessary to specify: the *referents* of the statements about dates, volumes, etc., existed 4.56 billion years ago as described by these statements - but not these statements themselves, which are contemporaneous with us.

But let us be more precise. A scientist would not state categorically that an ancestral event definitely occurred in the way in which she has described it - that would be imprudent. For we know - at least since Popper - that every theory advanced by empirical science is by right revisable: it can be falsified and supplanted by one that is more elegant, or that exhibits greater empirical accuracy. But this will not prevent the scientist from considering that it makes sense to *suppose* that her statement is true: that things could actually have happened the way she has described them and that so long as her description has not been supplanted by another theory, it is legitimate to assume the existence of the event such as she has reconstructed it. And in any case, even if her theory is falsified, this can only be by another theory which will also be about ancestral events, and which will also be supposed to be true. Thus, from a Cartesian perspective,
ancestral statements are statements whose referents can be posited as real (albeit in the past) once they are taken to have been validated by empirical science at a given stage of its development.

All this allows us to say that, on the whole, Cartesianism accounts rather satisfactorily for the scientist’s own conception of her discipline. We could even wager, without taking too much of a risk, that where the theory of qualities is concerned, scientists are much more likely to side with Cartesianism than with Kantianism: they would have little difficulty in conceding that secondary qualities only exist as aspects of the living creature’s relation to its world - but they would be much less willing to concede that (mathematizable) primary qualities only exist so long as we ourselves exist, rather than as properties of things themselves. And the truth is that their unwillingness to do so becomes all too understandable once one begins to seriously examine how the correlationist proposes to account for ancestrality.

For let us be perfectly clear: from the perspective of the correlationist, the interpretation of ancestral statements outlined above is inadmissible - or at least, inadmissible so long as it is interpreted literally. Doubtless, where science is concerned, philosophers have become modest - and even prudent. Thus, a philosopher will generally begin with an assurance to the effect that his theories in no way interfere with the work of the scientist, and that the manner in which the latter understands her own research is perfectly legitimate. But he will immediately add (or say to himself): legitimate, as far as it goes. What he means is that although it is normal, and even natural, for the scientist to adopt a spontaneously realist attitude, which she shares with the
'ordinary man', the philosopher possesses a specific type of knowledge which imposes a correction upon science's ancestral statements - a correction which seems to be minimal, but which suffices to introduce us to another dimension of thought in its relation to being.

Consider the following ancestral 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: he will not contest the claim that it is in fact event Y that occurred, nor will he contest the dating of this event. No - he will simply add - perhaps only to himself, but add it he will - something like a simple codicil, always the same one, which he will discretely append to the end of the phrase: event Y occurred x number of years before the emergence of humans -for humans (or even, for the human scientist). This codicil is the codicil of modernity: the codicil through which the modern philosopher refrains (or at least thinks he does) from intervening in the content of science, while preserving a regime of meaning external to and more originary than that of science. Accordingly, when confronted with an ancestral statement, correlationism postulates that there are at least two levels meaning in such a statement: the immediate, or realist meaning; and the I more originary correlationist meaning, activated by the codicil.

What then would be a literal interpretation of the ancestral statement? The belief that the realist meaning of the ancestral statement is its ultimate meaning - that there is no other regime of meaning capable of deepening our understanding of it, and that consequently the philosopher's codicil is irrelevant when it comes to analysing the signification of the statement. Yet this is precisely
what the correlationist cannot accept. For suppose for a moment that the realist or Cartesian interpretation harboured the key to the ultimate meaning of the ancestral statement. We would then be obliged to maintain what can only appear to the post-critical philosopher as a tissue of absurdities; to wit (and the list is not exhaustive):

- that being is not co-extensive with manifestation, since events have occurred in the past which were not manifest to anyone;
- that what is preceded in time the manifestation of what is;
- that manifestation itself emerged in time and space, and that consequently manifestation is not the givenness of a world, but rather an intra-worldly occurrence;
- that this event can, moreover, be dated;
- that thought is in a position to think manifestation’s emergence in being, as well as a being or a time anterior to manifestation;
- that the fossil-matter is the givenness in the present of a being that is anterior to givenness; that is to say, that an arche-fossil manifests an entity’s anteriority vis-a-vis manifestation.

But for the correlationist, such claims evaporate as soon as one points out the self-contradiction - which he takes to be flagrant - inherent in this definition of the arche-fossil: givenness of a being anterior to givenness. ‘Givenness of a being’ - here is the crux: being is not anterior to givenness, it gives itself as anterior to givenness. This suffices to demonstrate that it is absurd to
envision an existence that is anterior - hence chronological, into the bargain - to givenness itself. For givenness is primary and time itself is only meaningful insofar as it is always-already presupposed in man's relation to the world. Consequently, for the correlationist, there are indeed two levels at which ancestrality can be approached, each corresponding to the double occurrence of the term 'givenness' in the statement above, to wit: being gives itself (occurrence 1) as anterior to givenness (occurrence 2). At the first, superficial level, I forget the originary nature of givenness, losing myself in the object and naturalizing givenness by turning it into a property of the physical world, one that is liable to appear and disappear in the same way as a thing (being gives itself as anterior to givenness). But at the deeper level (being gives itself as anterior to givenness), I grasp that the correlation between thought and being enjoys logical priority over every empirical statement about the world and intra-worldly entities. Thus I have no difficulty reconciling the thesis of the chronological anteriority of what is over what appears - this being the level of meaning that is superficial, realist, derivative - with the thesis of the logical priority which givenness enjoys vis-a-vis what is given in the realm of givenness (to which the aforementioned chronological anteriority belongs) - the latter thesis corresponding to the deeper, more originary level, which alone is truly correct. I then cease to believe that the accretion of the earth straightforwardly preceded in time the emergence of humanity, the better to grasp that the status of the statement in question is more complex. This statement, properly understood, can be formulated as follows: The present community of scientists has objective reasons to consider that the accretion of the earth preceded the emergence of
hominids by x number of years.' Let us analyse this formulation.

We said above that, since Kant, objectivity is no longer defined with reference to the object in itself (in terms of the statement's adequation or resemblance to what it designates), but rather with reference to the possible universality of an objective statement. It is the intersubjectivity of the ancestral statement - the fact that it should by right be verifiable by any member of the scientific community - that guarantees its objectivity, and hence its 'truth'. It cannot be anything else, since its referent, taken literally, is unthinkable. If one refuses to hypostatize the correlation, it is necessary to insist that the physical universe could not really have preceded the existence of man, or at least of living creatures. A world is meaningful only as given-to-a-living (or thinking)-being. Yet to speak of 'the emergence of life' is to evoke the emergence of manifestation amidst a world that pre-existed it. Once we have disqualified this type of statement, we must confine ourselves strictly to what is given to us: not the unthinkable emergence of manifestation within being, but the universalizable given of the present fossil-material: its rate of radioactive decay, the nature of stellar emission, etc. According to the correlationist, an ancestral statement is true insofar as it is founded upon an experiment that is in the present - carried out upon a given fossil-material - and also universalizable (and hence by right verifiable by anyone). It is then possible to maintain that the statement is true, insofar as it has its basis in an experience which is by right reproducible by anyone (universality of the statement), without believing naively that its truth derives from its adequation to the effective reality of its referent (a world without a givenness of the world).
To put it in other words: for the correlationist, in order to grasp the profound meaning of the fossil datum, one should not proceed from the ancestral past, but from the correlational present. This means that we have to carry out a retrojection of the past on the basis of the present. What is given to us, in effect, is not something that is anterior to givenness, but merely something that is given in the present but gives itself as anterior to givenness. The logical (constitutive, originary) anteriority of givenness over the being of the given therefore enjoins us to subordinate the apparent sense of the ancestral statement to a more profound counter-sense, which is alone capable of delivering its meaning: it is not ancestrality which precedes givenness, but that which is given in the present which retrojects a seemingly ancestral past. To understand the fossil, it is necessary to proceed from the present to the past, following a logical order, rather than from the past to the present, following a chronological order.

Accordingly, any attempt to refute dogmatism forces two decisions upon the philosopher faced with ancestrality: the doubling of meaning, and retrojection. The deeper sense of ancestrality resides in the logical retrojection imposed upon its superficially chronological sense. Try as we might, we do not see any other way to make sense of the arche-fossil while remaining faithful to the injunctions of the correlation.

Now, why is this interpretation of ancestrality obviously insupportable? Well, to understand why, all we have to do is ask the correlationist the following question: what is it that happened 4.56 billion years ago? Did the accretion of the earth happen, yes or no?
In one sense, yes, the correlationist will reply, because the scientific statements pointing to such an event are objective, in other words, inter-subjectively verifiable. But in another sense, no, he will go on, because the referent of such statements cannot have existed in the way in which it is naively described, i.e. as non-correlated with a consciousness. But then we end up with a rather extraordinary claim: the ancestral statement is a true statement, in that it is objective, but one whose referent cannot possibly have actually existed in the way this truth describes it. It is a true statement, but what it describes as real is an impossible event; it is an ‘objective’ statement, but it has no conceivable object. Or to put it more simply: it is a non-sense. Another way of saying the same thing is to remark that if ancestral statements derived their value solely from the current universality of their verification they would be completely devoid of interest for the scientists who take the trouble to validate them. One does not validate a measure just to demonstrate that this measure is valid for all scientists; one validates it in order to determine what is measured. It is because certain radioactive isotopes are capable of informing us about a past event that we try to extract from them a measure of their age: turn this age into something unthinkable and the objectivity of the measure becomes devoid of sense and interest, indicating nothing beyond itself. Science does not experiment with a view to validating the universality of its experiments; it carries out repeatable experiments with a view to external referents which endow these experiments with meaning.

Thus the retrojection which the correlationist is obliged to impose upon the ancestral statement amounts to a veritable counter-sense with respect to the latter: an ancestral statement only
has sense if its literal sense is also its ultimate sense. If one divides the sense 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. This is why a consistent correlationist should stop ‘compromising’ with science and stop believing that he can reconcile the two levels of meaning without undermining the content of the scientific statement which he claims to be dealing with. There is no possible compromise between the correlation and the arche-fossil: once one has acknowledged one, one has thereby disqualified the other. In other words, the consistent correlationist should stop being modest and dare to assert openly that he is in a position to provide the scientist with an a priori demonstration that the latter’s ancestral statements are illusory: for the correlationist knows that what they describe can never have taken place the way it is described.

But then it is as if the distinction between transcendental idealism - the idealism that is (so to speak) urbane, civilized, and reasonable - and speculative or even subjective idealism - the idealism that is wild, uncouth, and rather extravagant - it is as if this distinction which we had been taught to draw - and which separates Kant from Berkeley - became blurred and dissolved in light of the fossil-matter. Confronted with the arche-fossil, every variety of idealism converges and becomes equally extraordinary - every 1 variety of correlationism is exposed as an extreme idealism, one that is incapable of admitting that what science tells
us about these occurrences of matter independent of humanity effectively occurred as described by science. And our correlationist then finds himself dangerously close to contemporary creationists: those quaint believers who assert today, in accordance with a 'literal' reading of the Bible, that the earth is no more than 6,000 years old, and who, when confronted with the much older dates arrived at by science, reply unperturbed that God also created at the same time as the earth 6,000 years ago those radioactive compounds that seem to indicate that the earth is much older than it is - in order to test the physicists' faith. Similarly, might not the meaning of the arche-fossil be to test the philosopher's faith in correlation, even when confronted with data which seem to point to an abyssal divide between what exists and what appears?

***

We will now consider two correlationist rejoinders to the ancestral objection, in order to render the latter more precise and to underline its singularity.

1) The first rejoinder proceeds by trivializing the problem of the arche-fossil, identifying it with a familiar and inconsequential anti-idealist argument. Our opponent will formulate it as follows:

'Your objection can easily be reduced to a hackneyed argument. First I note that your thesis arbitrarily privileges temporal seniority, whereas spatial distance would raise exactly the same difficulty (or rather the same semblance of difficulty) for correlationism. An event occurring in an immensely distant galaxy, beyond the reach of every possible observation, would in effect provide the spatial analogue for the event occurring prior to
terrestrial life. In both cases, what we are dealing with are events devoid of possible witnesses (or at least of terrestrial ones), which is precisely the core of your argument, since the latter claims that correlationism cannot think that which cannot be connected to a relation-to-the-world. We should therefore be entitled to extend to space an argument which has hitherto been restricted to time, and adjoin the question of the distant to the question of the ancient.

'But then - and this is the second stage in our argument - we would notice that the notions of 'distance' or 'ancientness' are both vague, since no one can settle once and for all, in the context of this argument, where "the proximate" or "the recent" end, and where the "the distant" or "the ancestral" begin. Above all, we would immediately notice that the question of the relative proximity of the object under consideration becomes irrelevant to the force of the argument once the scope of the latter has been extended to space. Thus, for example, craters observed on the moon are actually 'closer' to us, from the viewpoint of the argument under consideration, than a vase falling in a country house when there is nobody there. The observed craters, in effect, pose no problem whatsoever to correlationism, since they are connected to a subject who apprehends them, whereas according to you the fallen vase would pose such a problem, since it went un-witnessed. Similarly, by your lights, a recent but un-witnessed temporal event is more problematic than an ancient event which has been registered in the commemorative experience of some consciousness or other.

Consequently, your argument boils down to a particular variant of a trivial objection against idealism. One starts from the
premise that what is un-witnessed is un-thinkable, unless it be by realism. And given that the ancestral event is by definition un-witnessed, since it is anterior to all terrestrial life, one easily concludes that it is un-thinkable for correlationism. But not only is this refutation of correlationism unoriginal, it is also grossly inadequate. For the lacunary nature of the given has never been a problem for correlationism. One only has to think of Husserl’s famous ‘givenness-by-adumbrations’ [Abschattung]: a cube is never perceived according to all its faces at once; it always retains something non-given at the heart of its givenness. Generally speaking, even the most elementary theory of perception will insist on the fact that the sensible apprehension of an object always occurs against the backdrop of the un-apprehended, whether it be with regard to the object’s spatiality or its temporality. Thus the visual perception of the sea presupposes the non-perception of its depths; the waves which we hear in the morning are heard against the backdrop of our not-hearing of the waves from the night before, etc.

Consequently, it is not difficult to conceive the status of the un-witnessed in the context of a datum which must be essentially considered as lacunary. All that is required in order to re-insert this type of occurrence within the correlationist framework is to introduce a counter-factual such as the following: had there been a witness, then this occurrence would have been perceived in such and such a fashion. This counterfactual works just as well for the falling of a vase in an empty house as for a cosmic or ancestral event, however far removed. In either case, correlationism simply says the same thing as science: had there been a witness to the fall of the vase, he or she would have seen it fall according to the laws
of gravity; had there been a witness to the emergence of life, its observation—granted the biological hypotheses about the origin of life—would have tallied with our theories about it, etc.

‘Accordingly, the ancestral phenomenon in no way constitutes a new objection against correlationism—it merely dresses up an old argument; one that is as well worn as it is harmless.’

The entire basis for this rejoinder consists in conflating two distinct notions: that of the ancestral, and that of the (spatially) distant or (temporally) ancient.

The objection against idealism based on the distal occurrence is in fact identical with the one based on the ancient occurrence, and both are equivalent versions (temporal or spatial) of what could be called ‘the objection from the un-witnessed’, or from the ‘un-perceived’. And the correlationist is certainly right about one thing—that the argument from the un-perceived is in fact trivial and poses no threat to correlationism. But the argument from the arche-fossil is in no way equivalent to such an objection, because the ancestral does not designate an ancient event—it designates an event anterior to terrestrial life and hence anterior to givenness itself. Though ancestrality is a temporal notion, its definition does not invoke distance in time, but rather anteriority in time. This is why the arche-fossil does not merely refer to an un-witnessed occurrence, but to a non-given occurrence—ancestral reality does not refer to occurrences which a lacunary givenness cannot apprehend, but to occurrences which are not contemporaneous with any givenness, whether lacunary or not. Therein lies its singularity and its critical potency with regard to correlationism.

Let us be perfectly clear on this point. The reason why the
traditional objection from the un-witnessed occurrence - it being a matter of indifference whether the latter is spatial or temporal - poses no danger to correlationism is because this objection bears upon an event occurring when there is already givenness. Indeed, this is precisely why the objection can be spatial as well as temporal. For when I speak of an event that is distant in space, this event cannot but be contemporaneous with the consciousness presently envisaging it. Consequently, an objection bearing on something that is unperceived in space necessarily invokes an event and a consciousness which are considered as synchronic. This is why the event that is un-witnessed in space is essentially recuperable as one mode of lacunary givenness among others - it is recuperable as an in-apparent given which does not endanger the logic of correlation. But the ancestral does not designate an absence in the given, and for givenness, but rather an absence of givenness as such. And this is precisely what the example of the spatially unperceived remains incapable of capturing - only a specific type of temporal reality is capable of capturing it; one which is not ancient in any vague sense, nor some sort of lacuna in that which is temporally given, but which must rather be identified with that which is prior to givenness in its entirety. It is not the world such as givenness deploys its lacunary presentation, but the world as it deploys itself when nothing is given, whether fully or lacunarily. Once this has been acknowledged, then one must concede that the ancestral poses a challenge to correlationism which is of an entirely different order than that of the unperceived, viz., how to conceive of a time in which the given as such passes from non-being into being? Not a time which is given in a lacunary fashion, but a time wherein one passes from the
lacuna of all givenness to the effectivity of a lacunary givenness.

Accordingly, there can be no question of resolving this problem by invoking a counterfactual, since this would presuppose precisely what is being called into question: if a consciousness had observed the emergence of terrestrial life, the time of the emergence of the given would have been a time of emergence in the given. But the time at issue here is the time wherein consciousness as well as conscious time have themselves emerged in time. For the problem of the arche-fossil is not the empirical problem of the birth of living organisms, but the ontological problem of the coming into being of givenness as such. More acutely, the problem consists in understanding how science is able to think - without any particular difficulty - the coming into being of consciousness and its spatio-temporal forms of givenness in the midst of a space and time which are supposed to pre-exist the latter. More particularly, one thereby begins to grasp that science thinks a time in which the passage from the non-being of givenness to its being has effectively occurred - hence a time which, by definition, cannot be reduced to any givenness which preceded it and whose emergence it allows. In other words, at issue here is not the time of consciousness but the time of science - the time which, in order to be apprehended, must be understood as harbouring the capacity to engender not only physical things, but also correlations between given things and the giving of those things. Is this not precisely what science thinks? A time that is not only anterior to givenness, but essentially indifferent to the latter because givenness could just as well never have emerged if life had not arisen? Science reveals a time that not only does not need conscious time but that allows the latter to
arise at a determinate point in its own flux. To think science is to think the status of a becoming which cannot be correlational because the correlate is in it, rather than it being in the correlate. So the challenge is therefore the following: to understand how science can think a world wherein spatio-temporal givenness itself came into being within a time and a space which preceded every variety of givenness.\(^\text{13}\)

We now see that the sophistical nature of this first rejoinder consists in trying to occlude one lacuna by another, in trying to mask the non-being of the given by a given of non-being, as though the former could be reduced to the latter. But this switching of absences, this subterfuge of lacunae, cannot disguise the fundamental difference between our two voids - and thereby the difference between the two arguments: the trivial argument from the unperceived and the valid argument from the ancestral.\(^\text{14}\)

2) We shall formulate the second correlationist rejoinder from

---

\(^{13}\) Although it is essentially distinct from the objection from the un-witnessed, the argument from ancestrality is nevertheless closer to the objection which points out that the singular birth and death of consciousnesses implies a time which cannot itself be of the order of consciousness. But correlationism could defend itself against the latter by pointing out that one’s individual birth and death occurs within a time which is woven from intersubjectivity - the time of the community of consciousnesses, which means that to be born and to die is to be born and to die for other consciousnesses, and hence to be deployed in a becoming which is once more reducible to its givenness for a community of egos. It is our conviction that this rejoinder is a desperate sophism, which reduces emergence and perishing to whatever the other perceives of it. But it is in order to avoid this loophole that we have restricted our argument to the ancestral, which rules out any recourse to community, but more importantly has the advantage of demonstrating that it is science which grants us access to a time which cannot be captured by any correlation.

\(^{14}\) We shall see in Chapter 5 of this book that Husserl and Heidegger registered this difference - although the unperceived never presented them with any serious difficulty, since it is synonymous with lacunary manifestation, they obviously considered the thought of a world devoid of all life to be a redoubtable challenge.
a transcendental perspective, which here constitutes the more incisive objection to our argumentation:

Your objection, made in the name of the arche-fossil, evinces an elementary confusion between the empirical and the transcendental level of the problem under consideration.

The empirical question is that of knowing how bodies that were organic prior to becoming conscious appeared in an environment which is itself physical. The transcendental question consists in determining how the science of this physical emergence of life and consciousness is possible. Now, these 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 Mobius strip. You proceed as though the transcendental subject - which is ultimately the subject of science - was of the same nature as the physical organ which supports it - you collapse the distinction between the conscious organ which arose within nature and the subject of science which constructs the knowledge of nature. But the difference between these two is that the conscious organ exists; it is an entity in the same sense as any other physical organ; whereas the transcendental subject simply cannot be said to exist; which is to say that the subject is not an entity, but rather a set of conditions rendering objective scientific knowledge of entities possible. But a condition for objective cognition cannot be treated as an object, and since only objects can be said to exist, it is necessary to insist that a condition does not exist - precisely because it conditions.
Consequently, your conception of a "time of science," in which both bodies and the manifestation of bodies arose, is "ambivalent" - it conflates the objective being of bodies, which do in fact emerge and perish in time, with the conditions for the objective knowledge of the objective being of bodies, which have nothing to do with any sort of time. To inscribe these conditions in time is to turn them into objects and hence to anthropologize them. But one cannot reason about these conditions in the same way as one reasons about objects. The paradox you point to arises from crossing two levels of reflection which should never be allowed to cross. It suffices to abjure such crossing for the paradox to dissolve: on the side of the object, bodies are born and die; while on the other side, conditions provide the norms for knowledge of the object. But these conditions cannot be said to be born or to die - not because they are eternal, in the manner of a divine substance (which would be to think of them as an object once again, albeit a supersensible one), but simply because they cannot be situated at the same level of reflection - to do so would engender a paradox which, like that of the liar, results from a confusion between discourse and its object. Consequently, it is perfectly admissible for you to say that bodies, which provide the objective support for subjects, are born and perish in time, but you cannot say the same about the conditions which permit knowledge of such a fact. If you do, you have simply violated one of the basic requirements for the transcendental - but you have not thereby refuted it, you have simply disregarded it. Thus you cannot claim that your problem is "ontological" rather than empirical, since your problem of the arche-fossil is empirical, and only empirical - it pertains to objects. As for the transcendental
conditions of cognition, they cannot be said to arise or to disappear - not because they are eternal but because they are “outside time” and “outside space” - they remain out of reach of the scientific discourse about objects because they provide the forms for this discourse. Every attempt to subordinate them to the science whose exercise they allow is inherently doomed to elide the very meaning of the transcendental.

Here we have a classic defence of Kantian idealism - the charge of conflating the empirical and the transcendental - but one which, in the present case, remains entirely ineffectual. The 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, and hence simply does not exist. The notion of condition allows one to ‘de-ontologize’ the transcendental by putting it out of reach of any reflection about being. But if the transcendental philosopher wishes to play with the notion of condition in this way, he is not likely to prevail for very long. Here is why.

We are told that the transcendental does not exist because it does not exist in the way in which objects exist. Granted, but even if we concede that the transcendental subject does not exist in the way in which objects exist, one still has to say that there is a transcendental subject, rather than no subject. Moreover, nothing prevents us from reflecting in turn on the conditions under which there is a transcendental subject. And among these conditions we find that there can only be a transcendental subject on condition that such a subject takes place.

What do we mean by ‘taking place’? We mean that the
transcendental, insofar as it refuses all metaphysical dogmatism, remains indissociable from the notion of a point of view. Let us suppose a subject without any point of view on the world - such a subject would have access to the world as 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 - the world for it would no longer be a regulatory Idea of knowledge, but rather the transparent object of an immediately achieved and effective knowledge. Similarly, it would no longer be possible to ascribe sensible receptivity and its spatio-temporal form - one of the two sources of knowledge for Kant, along with the understanding - to such a subject, which would therefore be capable of totaling the real infinity of whatever is contained in each of these forms. By the same token, since it would no longer be bound to knowledge by perceptual adumbration, and since the world for it would no longer be a horizon but rather an exhaustively known object, such a subject could no longer be conceived as a transcendental subject of the Husserlian type.

But how do notions such as finitude, receptivity, horizon, regulative Idea of knowledge, arise? They arise because, as we said above, 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, of which it can only ever discover a finite aspect, and which it can never recollect in its totality. But if the transcendental subject is localized among the finite objects of its world in this way, this means that it remains indissociable from its incarnation in a body; in other words, it is indissociable from a
determinate object in the world. Granted, the transcendental is the condition for knowledge of bodies, but it is necessary to add that the body is also the condition for the taking place of the transcendental. 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 - the body, one could say, is the 'retro-transcendental' condition for the subject of knowledge. We will invoke an established distinction here and say that a subject is *instantiated* rather than *exemplified* by a thinking body. An entity is said to be instantiated by an individual when that entity does not exist apart from its individuation; and it is said to be merely exemplified by an individual if one assumes that the entity also exists apart from its individuation. Thus, in Plato, the entity 'man' is merely exemplified by the perceptible individual man since it also exists - and exists above all - as an Idea. By way of contrast, for an empiricist, the species 'man' is instantiated by individual men because this species does not exist apart from the individuals in which it is incarnated.

But it is clear that what distinguishes transcendental idealism from speculative idealism is the fact that the former does not posit the existence of the transcendental subject apart from its bodily individuation - otherwise, it would be guilty of speculatively hypostatizing it as an ideal and absolute subject. Thus the subject is instantiated rather than exemplified by thinking bodies. But if this is so, then when we raise the question of the emergence of thinking bodies in time we are also raising the question of *the temporality of the conditions of instantiation, and hence of the taking place of the transcendental as such*. Objective bodies may not be a sufficient condition for the taking place of the transcendental, but
they are certainly a necessary condition for it. We thereby discover that the time of science temporalizes and spatializes the emergence of living bodies; that is to say, the emergence of the conditions for the taking place of the transcendental. What effectively emerged with living bodies were the instantiations of the subject, its character as point-of-view-on-the-world. The fact that subjects emerged here on this earth or existed elsewhere is a purely empirical matter. But the fact that subjects appeared - simply appeared - in time and space, instantiated by bodies, is a matter that pertains indissociably both to objective bodies and to transcendental subjects. And we realize that this problem simply 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 the spatio-temporal forms of representation. To think this ancestral space-time is thus to think the conditions of science and also to revoke the transcendental as essentially inadequate to this task.

***

We now begin to grasp why ancestrality constitutes a philosophical problem, one liable to make us revise decisions often considered as infrangible since Kant. But we should state right away that it is not our aim here to resolve this problem; only to try to provide a rigorous formulation of it, and to do so in such a way that its resolution no longer seems utterly inconceivable to us.

To that end, we must once more emphasize what is truly at stake in what we shall henceforth call 'the problem' of
ancestral. Our question was the following: what are the conditions under which an ancestral statement remains meaningful? But as we have seen, this question harbours another one, which is more originary, and which delivers its veritable import, to wit: how are we to conceive of the empirical sciences’ capacity to yield knowledge of the ancestral realm? For what is at stake here, under the cover of ancestry, is the nature of scientific discourse, and more particularly of what characterizes this discourse, i.e. its mathematical form. Thus our question becomes: how is mathematical discourse able to describe a world where humanity is absent; a world crammed with things and events that are not the correlates of any manifestation; a world that is not the correlate of a relation to the world? This is the enigma which we must confront: mathematics’ ability to discourse about the great outdoors; to discourse about a past where both humanity and life are absent. Or to say the same thing in the form of a paradox (which we will call ‘the paradox of the arche-fossil’): how can a being manifest being’s anteriory to manifestation? What is it that permits mathematical discourse to bring to light experiments whose material informs us about a world anterior to experience? We do not deny that this paradox has the appearance of a sheer contradiction - the redoubtable problem posed to us by the arche-fossil consists precisely in holding fast to this contradiction the better eventually to expose its illusory character. In order to think science’s ancestral reach, we must explain why this contradiction is merely apparent.

Accordingly, we can reformulate our question thus: what is the condition that legitimates science’s ancestral statements? This is a question that seems to be of the transcendental type, but it is
peculiar in that its primary condition is the relinquishing of transcendentalism. It demands of us that we remain as distant from naïve realism as from correlationist subtlety, which are the two ways of refusing to see ancestrality as a problem. We must bear in mind the apparently unanswerable force of the correlationist circle (contrary to the naïve realist), as well as its irremediable incompatibility with ancestrality (contrary to the correlationist). Ultimately then, we must understand that what distinguishes the philosopher from the non-philosopher in this matter is that only the former is capable of being astonished (in the strong sense) by the straightforwardly literal meaning of the ancestral statement. The virtue of transcendentalism does not lie in rendering realism illusory, but in rendering it astonishing, i.e. apparently unthinkable, yet true, and hence eminently problematic.

The arche-fossil enjoins us to track thought by inviting us to discover the 'hidden passage' trodden by the latter in order to achieve what modern philosophy has been telling us for the past two centuries is impossibility itself: to get out of ourselves, to grasp the in-itself, to know what is whether we are or not.