QUENTIN MEILLASSOUX

Iteration, Reiteration, Repetition: A Speculative Analysis of the Meaningless Sign.

Freie Universität, Berlin, 20. April 2012

www.spekulative-poetik.de

translator: Robin Mackay

1. Recapitulation of the Principal Elements of Factial Speculation

My main concern, for some years now, has been the capacities of thought: what exactly can thought do? My thesis (which may seem bizarrely classical) comes down to saying that thought is capable of the 'absolute', capable even of producing something like 'eternal truths'; and this despite the various destructions and deconstructions that all traditional metaphysics have undergone over the last century and a half. I began to develop this position in 2006 in *After Finitude* (AF), in a form that, to my mind, made possible an original reactivation of materialism; and it this investigation that I wish to continue to pursue here.

Let us firstly recall the strategy I followed in order to try to assert the 'absolutizing' capacity of thought: My idea was to propose the most economical and most rigorous possible model of de-absolutization. For a profusion of critiques have been directed against philosophy's claim to the absolute, but it seemed to me that these critiques all rested upon core arguments that could be modeled. Thus, while I cannot claim to reconstitute the richness and complexity of these various antiabsolutisms, my hope was to develop an adversary rigorous enough that any argument capable of refuting this model-objector would be capable equally of refuting any historically-existing critique.

I thus invented an anti-absolutism that I called, for reasons I shall explain, 'correlationism'. I reduced it down to two arguments, themselves called the *correlational circle* and *correlational facticity*.

I will briefly review them in this order, which is the only logical order in which to do so.

If metaphysical materialism seemed basically untenable after Berkeley, this is for a reason perhaps as simple as it is decisive: the materialist seems always to commit a 'pragmatic contradiction' when he claims to know a reality independent of his thought, since the reality of which he speaks is precisely that which is given him to think. When I claim to accede to a thing in itself, I accede in truth only to a given,

¹ I speak of a 'pragmatic' rather than a 'performative' contradiction, because the latter concerns only an act of public enunciation, a statement said out loud. Now, the contradiction that I refer to can obtain even in a mental act. If I say, or merely think, 'I do not exist', the content of this proposition is contradicted by the act that produces it.

from which I cannot abstract the fact that it is strictly correlated to the access I have to it, and which has no conceivable meaning outside of this access – outside the way in which I conceive of it. In this sense, it seems pointless to ask *what things are*, when no mind can ever apprehend them.

By correlationism, I thus understand, in a first approximation, every philosophy that maintains the impossibility of acceding through thought to a being *independent* of thought. We never, according to this type of philosophy, have access to any intended thing (understood in the most general sense) that is not always-already correlated to an act of thinking (understood, again, in the most general sense). Consequently, correlationism posits, against all materialism, that thought cannot *escape from itself* so as to accede to a world not yet affected by the modes of apprehension of our subjectivity.

I thus call the 'correlational circle' the argument that consists in affirming that a vicious, essentially pragmatic, circle is inherent to any materialism that posits the absolute existence of a reality outside all representation. This argument seems to describe a fundamental deadlock that lies in wait for every materialism so defined: how can one claim to think *what is when there is no thought*, without seeing that this claim involves a manifest contradiction? Correlation itself can be thought in many different ways: subject-object, consciousness-given, noetico-noematic correlate, being-in-the-world, language-reference, etc. But in each case, correlation will be posited as a primordial fact rendering null and void any belief in the thinkability of an 'in itself' transcending all thought.

Correlationism cannot, however, rest upon this one decision alone – at least if it intends to respond to the definition I have given: namely, that of an enterprise of the de-absolutization of thought. For, if the correlational circle suffices to disqualify the materialist absolute, it does not suffice to disqualify *every* form of absolute, nor every form of realism. For there exists, as we well know, a non-materialist form of absolutism, whose principle consists no longer in claiming to think a non-correlational absolute, but in making correlation *itself* the absolute as such.

Before continuing, let us propose at this point a clear denomination of the positions in play here; a denomination that I believe is clearer than that used in *After Finitude*. I call 'correlationism' every form of de-absolutization of thought that, to obtain this result, argues from the closure of thought upon itself, and its subsequent incapacity to attain an absolute outside of it. I call 'speculative' every philosophy that claims, on the contrary, to attain such an absolute. I call 'materialism', as we have already seen, every thought acceding to an absolute that is at once external to thought and in itself devoid of all subjectivity. For example, Epicureanism is a materialism, in so far as it claims to accede to the absolute reality of atoms and void, where the latter have no subjective-psychological, egoic, sensible or vital traits whatsoever.

The same goes, according to the 'correlational circle', for the proposition 'I think an in-itself independent of thought'. It is thus a pragmatic contradiction (the content being contradicted by the act that enunciates the content, albeit mentally), and not just a performative contradiction (since the latter only happens at the level of public speech, but does not concern mental acts). In this sense, Hintikka was wrong to interpret the *Cogito* in terms of performative, rather than pragmatic, contradiction – for its statement (if I think, I am) could be solely mental.

But there exists a second, non-materialist form of absolutism: this absolutism is the only one to have survived the correlationist critique, for it consisted not in disputing the closure of thought upon itself, but in confirming it, in the name of the absoluteness of thought itself (or of certain of its characteristics). The thesis consisted in interpreting the closure of thought upon itself not as a symptom of its finitude, but as a consequence of its ontological necessity. If thought cannot exit from itself, this is not because it runs up against gnoseological limits, but because it discovers a form of existence that is intrinsically necessary: the subjective. Of course, the most elementary form of this belief would be solipsism: I can believe that it is my subjectivity, qua psychological individual, that is absolute, and therefore believe myself entirely alone in the world. But in the history of philosophy, no-one has ever sincerely taken this path; and the metaphysical reply to correlationism consisted rather in absolutizing the subjective in general – according to a trans-individual modality in which every human, and indeed every living or inorganic being, participates at its proper level. This absolutism took various forms, leading each time to the absolutization of one or many determinate forms of subjectivity, or even of the subject in its totality. Sensation was absolutized (Maupertius' and Diderot's hylozoism), as was reason (Hegelian idealism), freedom (the Schelling of 1809), perception (Bergson and the image in itself, in the first chapter of Matter and *Memory*), will (Schopenhauer), wills in their mutual conflict (Nietzsche's will to power), the self in its initial germ state (Deleuze's 'larval selves' in Difference and Repetition), etc. Thus there was a proliferation of subjectivizations of the real, sometimes conflicting with each other, in particular between the vitalist pole (from hylozoism to Deleuze via Nietzsche), and the idealist pole (dominated by Hegel). But such conflicts disguised a fundamental agreement: that after Berkeley, there could be no question of returning to the totally a-subjective reality of Epicurean materialism. Marxism did indeed try to maintain such a non-subjective conception of matter in a dialecticized form, but ultimately this came to nothing, except for Lenin's belated and undistinguished philosophical effort in Materialism and Empirio-Criticism, in the wake of the late Engels' philosophy of nature.

What we might call 'the era of Correlation' opened up by Berkeley – and which continues, in my opinion, to dominate continental philosophy today – can thus be described in the form of two opposite movements regarding the absolute: On one hand correlationism, which, in the form of skepticism, the transcendental, phenomenology or postmodernism, denied thought all access to the absolute. But on the other hand, there developed a new speculative tendency, which I shall from now on designate with a neologism: *subjectalism*. Subjectalism consists in absolutizing thought, or certain of its characteristics, so as to maintain a post-Berkeleyan antimaterialism without renouncing the speculative status of philosophy. Why this term 'subjectalism'? Because we need a term that allows us to encompass at once all forms of idealism and all forms of vitalism, so as to contest the apparent opposition between these currents – in particular during the twentieth century; and so as to emphasize instead their essential relatedness and their original anti-materialist complicity.

I shall return to this point shortly. But firstly I should like to go back to the terminology adopted in *After Finitude*, which has the potential to cause various misunderstandings. In that book, I argued for the same opposition, which is essential to my project, between correlationism and subjectalism; but I proceeded in a different way, and chose different terms to designate this same alternative. In the first chapter, I name 'correlationism' every closure of thought into correlation. Which means that the

philosophy that de-absolutizes thought with the help of correlation, and the philosophy that absolutizes correlation, are both considered to be 'correlationisms' at this level of the analysis. But in the following chapters, I refine my hypothesis, reserving the term 'correlationism' in the strict sense for the de-absolutization of thought, and referring to the other option as 'subjectivist metaphysics'. Therefore, in *After Finitude*, there is 'correlationism in the broad sense', which includes both correlationism in the strict sense (de-absolutization) and subjectivist metaphysics (absolutism). But the evolution of the vocabulary from chapter to chapter, and the fact that correlationism could designate either (in the strict sense) an anti-absolutist philosophical current or (in the broad sense) the two opposed currents of correlationism (in the strict sense) and metaphysical subjectivism – all of this created a regrettable air of confusion to which I intend to put an end.

So here are the terms I shall use from now on: I call the 'era of Correlation' (and no longer: 'correlation in the broad sense') the anti-materialist, post-Berkeleyan era that shut us up inside correlation, either through an anti-speculative gesture — which *alone* is now called correlationism — or through a speculative gesture — which I shall now call subjectalism, rather than subjectivist metaphysics (because of the 'relativist' connotation of the term 'subjectivism' — an unfortunate connotation since, on the contrary, the term is meant to designate an absolutist current).

Let us now come back to subjectalism, and to what is interesting about this denomination. With this term, as I have said, I wish to emphasize the anti-materialist complicity of vitalism and idealism. This basic agreement between idealism and vitalism (against the 'old' materialism) has given rise to some very strange arguments on the part of vitalism. For vitalism ostensibly sought to make itself the radical enemy of idealism; and yet in doing so, it did not want to take up the heritage of materialism. Hylozoism is thus the entirely 'subjectivized' form of the (supposed) materialism of the seventeenth century; that is to say, it is no longer a materialism at all, since in it, all reality is identified with a sensible mode of subjectivity, which is absolutized across all things. The strangest moment came when various vitalisms – Nietzsche, Deleuze – participated in the radical critique of consciousness and of the subject. In what did this 'anti-idealist' critique consist? It consisted in critiquing, no doubt, a certain mode of subjectivity that had been placed in a foundational position (consciousness, reason, freedom); but only so as to simultaneously hypostatize one or several traits of human subjectivity – even with regard to inorganic reality. This enterprise thus produced typically subjectalist concepts such as 'will to power', or the 'inorganic life of things'. Which is why this anti-idealism was fundamentally compatible with Bergson's spiritualism – as would become strikingly evident in Deleuze.

And so it was *this* that was paradoxically spoken of as the 'critique of the subject'... this way of putting the subjective everywhere, playing one type of subjectivity (will, life, perception) against another (consciousness, freedom). And it was also *this* that was readily spoken of as a 'de-anthropologization' of nature: refuting final causes (intentional, subjective in this sense) in nature, but hypostasizing another form of our very humanity (sensation, will, perception, creation) across all of reality; and seeing between the human and non-human only differences of degree (or of 'intensity') within this hypostasized subjectivity. Certainly, this anthropologization was well-masked by the abundant insistence upon the equivocity of the subjective terms employed. It was a question, so it was said, of subjectivity, of will, of perception – but not at all in the same sense that these terms took on when referring to

their human instantiation. But in that case, why use the *same words*? Why, if not because this supposedly radical difference is but a *difference in intensity*, not a *difference in nature*?

But the most singular form of this denial was perhaps another argument, typical of such a subjectalist hypostasis; another way in which it claimed to be antihumanist, or counter-anthropological: It is a question, as above, of breaking (so we are told) with the derisory anthropocentrism in which man believes himself the sole depository of the subjective faculty that one intends to absolutize; of showing that man is but one particular representative, misguided by the prejudices of his consciousness, of a sensibility, of a life, that overflows him in every direction. He must, so it was insisted, go back down within himself to the infra-conscious level, to participate fully in this a-human subjectivity whose flux conveys him and transpierces him. But this refusal of anthropocentrism in fact leads only to an anthropomorphism that consists in the illusion of seeing in every reality (even inorganic reality) subjective traits the experience of which is in fact entirely human, merely varying their degree (an equally human act of imagination). Man finds in himself, whether at the conscious or infra-conscious level, only his own subjectivity – which the really inhuman Universe is in no way obliged to take over, so as to please the philosopher who hopes through this experience to escape from himself. To free oneself of man, in this strange humanism-in-denial, was simply to disseminate oneself everywhere, even into rocks and particles, and according to a whole scale of intensities.

There were a number of rhetorical ways in which this or that non-materialist philosophy protested that, even so, it was not an heir to Berkeley – when it was guite obvious that this was always the case. Berkeley has been ceaselessly attacked over the course of the last three centuries, in rather ungrateful fashion, by philosophies that would rather rid themselves of this cumbersome ancestor. As far as subjectalism is concerned, we now begin to see how its supposedly non-anthropologistic logic of denial functioned. But symmetrically, the same period also saw attempts to think a 'materialism' compatible with correlationism: a materialism thought according to the exigencies of criticism, empiricism, or positivism (Lenin's empirio-criticism), or those of phenomenology (Sartre). This comes down to thinking a materialism that would no longer be worthy of the name, since in it, thought would no longer exit from itself. If only in an intentional mode, phenomenology recognized in the worldly given an exteriority in relation to consciousness, but not an independence in relation to it (it was always a merely relative exteriority, *correlative* to consciousness). The principle of denial was always substantially the same: materialism could not consist in affirming that matter existed absolutely outside our representations, since that would make of such a materialism a 'metaphysical realism' that went beyond all possible experience. But materialism is a speculative thesis (although not necessarily a metaphysical one – we shall come back to this): it affirms that one can think that which is, independently of all thought, of all subjectivity. What is more, without this proposition, it is no longer a materialism. To condemn it for this, as an outrageous 'metaphysics' that oversteps the bounds of experience, is to condemn it according to criteria that are not materialist, but criticist. But Kantian critique is an idealism (a transcendental and therefore correlationist idealism). One thus ends up condemning or reconfiguring materialism according to idealist criteria: either prohibiting it in the name of a subjective experience that is impossible to surpass (positivism hybridized with criticism); or reinventing it as a vitalism that sees the subjective everywhere.

Let us come back to the term 'subjectalism'. The critical force of this word 'subjectalism' is to put into the same camp these currents that claim to be radically opposed, to put them all together – Hegel, Nietzsche and Deleuze included – into the camp of Berkeley himself. For Berkeley, inventor of the argument of the correlationist circle, was not a correlationist, but a subjectalist: a philosopher for whom there existed only the subjective – minds and their ideas, human spirits or divine spirits.² Once you reopen the materialist struggle against every form of hypostasis of the subjective (not only of the subject in a limited sense, as consciousness, reason, freedom, but of the subject in all its modalities – will, sensation, preconscious life, etc.), you see only variants where we have been told there are radical, vertiginous *ruptures*. Every subjectalism is a variant of Berkeleianism – each time a new, reinvented way of inhabiting its formidably effective anti-materialist gesture. Berkeley, Hegel, Nietzsche and Deleuze prosecuted, according to diverse strategies, one and the same combat: that of abolishing the idea of de-subjectivized matter. And from this point of view, there is no essential difference between one of these thinkers and another. All make their home, in a more or less original way, on the Berkeleyan continent.

If there is a true critique of the subject, it must also be a critique of the subjective, and of its hypostasis: such a critique thus cannot *but* be materialist, since only the materialist absolutizes the pure non-subjective – the pure and simple *death*, with neither consciousness nor life, without any subjectivity whatsoever, that is represented by the state of inorganic matter – that is to say, matter anterior to and independent of every subject and all life. My project – a neo-materialist project – can thus be formulated as follows: how can we escape from both correlationism and subjectalism – from all of their historical variants, and even all conceivable variants? How can we carry out the conjoint recusal of skepticism, criticism, transcendental and existential phenomenology, and postmodernism (so many correlationisms), and idealism, spiritualism, and vitalism in their various forms (so many subjectalisms)?

Before unveiling my strategy for effectuating this twofold recusal of modern and contemporary anti-materialisms, I should like to make a final lexical remark. It concerns, this time, the difference between materialism and realism. Here again, I was not sufficiently clear in *After Finitude*, because at the time, the stakes of this distinction did not seem so crucial to me as they now do. I call 'realism' every position that claims to accede to an absolute reality – every speculative position, then. But we now understand that realism can be either materialist or subjectalist. So every materialism is a realism, but not every realism is a materialism (it can be a subjectalism: Berkeley is a realist of the spirit and of ideas). Thus, the appellation 'speculative realist', designating the movement (in itself important) with which I have become associated, does not quite correspond to my enterprise, since it also comprises the option that I seek to counter – subjectalism. If this term, nevertheless, was quite

-

² Thus, Berkeley did not 'found' correlationism, but only the 'era of Correlation', as we have said. He did so by giving subjectalist form to the argument of the 'correlational circle'. It is Hume, in my opinion, who inaugurates the properly correlationist form (a sceptical form, in fact) of the 'correlational circle': from the circle, he no longer deduces that all reality is spirit, but that we cannot extract ourselves from the sphere of impressions and ideas, and that the thing in itself must remain irreducibly unknown to us. Hume makes an anti-speculative use of the 'circle' that was invented by Berkeley to found a new type of absolute.

the correct one to choose to designate the set of projects of four philosophers who are indeed anti-correlationist, it is because two of them are, to my mind, anti-materialist, that is to say subjectalist – namely, Iain Hamilton Grant, who is (Deleuzo-) Schellengian, and Graham Harman, who hypostasizes our subjective relation to things by projecting it into the things themselves. Harman, in particular, develops a very original and paradoxical subjectalism, since he hypostasizes the relation we have with things that, according to him, withdraw continually from the contact we can make with them. But the implicit form of this withdrawal is given by our relation to things. To make of our subjective relation to things that withdraw from their (full) contact with us, the universal relation of things to things – this is a typically subjectalist gesture, carried out in a new and brilliant form, but which still belongs to what I have called the 'era of Correlation'. Now, it is this era that I wish to definitively escape, so as no longer to believe that my relation to things would be a part of every thing. Harman designates with the expression 'philosophies of access' philosophies that base themselves upon the relation between human and things, and which consider that we have access only to this access, not to the things themselves. But Harman, to my mind, does not escape from this 'access', since on the contrary he hypostasizes it for the things themselves: there is no longer any chance of our escaping from access. since from now on, it is everywhere. Only the materialist can escape from it, for he makes of this human access to things something that belongs only to the human-thing relation, and absolutely does not exist in things, a fortiori between things. If we are to keep the promise of escaping from access toward the thing itself, we must not rediscover access (to a greater or lesser degree of intensity) within the thing itself.

Let's return now to our demonstration. I said that correlation succeeds, with the help of its first argument (the 'correlationist circle'), in destroying all materialist realism. But it is powerless to combat subjectalist realism with the same argument. For the latter also affirms that one cannot, without contradiction, extract oneself from

³ Ray Brassier's nihilism is closer to the option that I wish to defend, in so far as it seems to me to be at once anti-correlationist and anti-subjectalist. My disagreement with his important and impressive book (Nihil Unbound) lies in the fact that I still cannot see how Laruelle's non-philosophy, which seems essential to Brassier, allows him to obtain such an outcome. If it is explained to me that this is not his intention (since materialism and anti-materialism are 'still philosophies'), then I must refuse this non-philosophy; because, to my mind, there is no other possibility today than to be either a materialist or an anti-materialist (whether in the correlationist or subjectalist form) – every surpassing of this alternative is illusory, which is easy to prove for any supposed third option, at least if one takes the time to formulate it clearly. On the other hand, if it is indeed the intention of non-philosophy to recuse correlationism and subjectalism, then I would need two things to be explained: (a) How it achieves this (this remains obscure to me); (b) In what way my own approach is insufficient (which, of course, I don't believe it is). I would add, more incisively, the following thesis – which is, more exactly, a simple working hypothesis: It is because the options of correlationism, subjectalism, and materialism saturate the space of the philosophically thinkable, that every philosophical claim to be 'outside' or 'beyond' these options must necessarily be given in one of two (and only two) possible forms: either in a manifestly incorrect form, which will be revealed once the philosophy in question is clearly exposited; or in an irremediably obscure form.

thought (in the broad sense of subjectivity),⁴ but draws the inverse conclusion (no longer: thought cannot think the absolute; but: thought thinks thought as the absolute). Confronted with this second form of non-materialist absoluteness, the correlationist circle is of no help, and we must mobilize against it another decisive argument, namely what I call *correlational facticity*.

To understand the second argument, let us take up more rigorously the meaning of subjectalism – at least in so far as it is stated in its most rigorous form (which, historically speaking, was not always the case). In this new defense of the absolute, the reasoning is as follows: since the very idea of an 'in itself' independent of thought is inconsistent, it makes sense to posit that this in itself, since it is unthinkable for us, is impossible in itself. If we know only that which is given to thought, this does not mean that we are separated from the absolute by being trapped within our subjective limits, but that, in an absolute sense, there can be nothing that is not correlated to a subjective act. The strict necessity with which correlationism demonstrated that we can never think outside of subjectivity, is transmuted into the thought of an ontological necessity: we always experience subjectivity as a necessary, and hence eternal, principle from which no one can escape. We shall thus define as subjectalism every metaphysics that absolutizes the correlation of being and thought, whatever sense it attaches to the subjective and objective poles of such a relation. Hegelian idealism is obviously the paradigm of such a metaphysics of the Subject thought as the Absolute – but vitalism obeys the same logic, even if it does not always do so in full consciousness of its fundamental argument.

We can see that correlationism, in order to counter the subjectivist absolute and not just the materialist absolute, must mobilize a second argument, capable of deabsolutizing the correlate itself, capable of prohibiting its becoming-necessary qua perennial structure of that which is. This second argument is that of 'correlational facticity'.

For correlationism to be able to undertake a de-absolutization of thought, it must maintain that correlation *is not absolutely necessary*, and that this absence of an absolute necessity of correlation is accessible to thought – that one can justify it through an argument, that it is not simply posited as an act of faith. This *thinkable* non-necessity of correlation is precisely what I call 'correlational facticity'. The thesis of correlational facticity is thus as follows: thinking can think its own absence of necessity, not only qua personal consciousness, but qua supra-individual structure. It is only on this condition that correlationism can claim to think the very *possibility* of an *unknowable entirely-other* of correlation. How can this thesis be justified?

The only way to do so, to my mind, is to emphasis the *lack of any reason* for correlation itself, in whatever sense this correlation is understood. To what act of

_

⁴ I hope that it is clear to everybody that I intend the term 'thought' not solely in the strict sense of rational, argued thought, but also in the broad (Cartesian) sense encompassing every form of subjectivity (sensation, perception, imagination, memory, will, understanding, etc.) I place my confidence in the reader to understand that the strict sense (argued thought) is intended when I accord to the human subject the capacity to theorise the absolute ('the absolute is thinkable'), the broader sense when I speak of the 'closure of thought into itself' (in its subjective representations in general).

thought does this absence of reason (which I shall call 'irreason') refer? To a fundamental observation, one that is not empirical, but rather transcendental or even existential: Correlation may be unsurpassable, but it is not given in the manner of a necessary foundation; nothing in it indicates its own necessity, even though we cannot think its being-otherwise, even though we do not know how to escape from it to accede to its radical outside. *That there is* language, consciousness, being-in-theworld – this is, in each case, a matter of an originary 'there is' – of a first fact beyond which thought cannot reach.

We must distinguish here between three notions: the *contingent*, the *fact*, and the *arche-fact*. We shall call 'contingent' every entity, thing or event that I *know* is capable of not being, or could have not been, or could have been other. I know that this vase could have not existed, or could have existed otherwise; I know that this dropping of the vase onto the floor could have not happened.

We shall call 'fact', on the other hand, every type of entity whose being-other I can conceive of, but of which we do not know whether it could, effectively, have been other than it is. Our universe's laws of physics fall under this case: I can, without contradiction, and without it being invalidated by any past experience, conceive of these laws changing in the future (this is the principle of Hume's critique of causality); and therefore I cannot prove that they are necessary. But I do not know, for all that, whether these laws are indeed in fact contingent, or whether they are actually necessary even if this cannot be proved. In this sense, we shall say that these laws belong to 'facticity' – but that they are not 'contingent' in the same sense as the vase.

Finally, we shall call 'arche-fact' any fact which I cannot, in any way, conceive of as being other than it is, or as not being, but whose necessity I nevertheless cannot prove – in which regard we must say that it is a fact, in the broad sense. Now, it is precisely with regard to the notion of arche-fact thus defined that subjectivist absolutism and correlationism diverge.

For what does the subjectivist say? That I cannot think the other of correlation: I can indeed think that the world might have been given otherwise, that its laws might fail – for I can think, and even imagine, a world governed by other laws. But I cannot think the very abolition of correlation and of its possible variants, since to think their abolition is, once again, to think it as a correlate of my current thoughts, and thus to contradict myself pragmatically. Now, if the other of correlation is unthinkable, for the subjectivist this means it is impossible: the non-correlated is, according to him, a wholly absurd notion, and thus just as inexistent as that of the square circle. Correlation therefore is not, according to the subjectivist, a contingent reality: it is an absolute necessity. But the thesis of the correlationist is, on the contrary, as follows: certainly, I admit, I cannot think the other of correlation, and thus correlation is not a fact in the same way that physical laws are; but neither (he adds) can I found in reason the supposedly necessary being of correlation. Correlation, and my enclosure within it, these I can only *observe* through the exercise of my thought. Now, an observation is always a relation to something that is given, ultimately, as a pure *factum*. If I cannot think the other of correlation, this represents only the factual limit of my thought; but it cannot be proved that this subjective unthinkability of non-correlation corresponds to the absolute impossibility of such a non-correlational reality existing. We cannot prove that the unthinkable for us is impossible in itself without begging the question – without presupposing what is to be proven, namely that every experience of unthinkability corresponds to an absolute truth, a truth in itself and not just for us.

Correlation thus also constitutes a certain type of fact: a fact whose other is unthinkable, but whose other, nevertheless, cannot be posited as absolutely impossible. Correlation, in this sense, is an arche-fact.

What I then call the 'principle of factiality' consists in absolutising, no longer correlation (the first decision of correlationism) but correlational facticity (the second decision of correlationism). It is a matter of showing that the ultimate thesis of this de-absolutizing thought conceals a hidden absolute: facticity – indeed, arche-facticity. Why does facticity constitute an implicit absolute of correlationism? Because the latter must admit that we are capable of thinking our possible non-being, so as to stave off the subjectivist absolute that declares it unthinkable. But the possibility that we should cease to exist – this possibility is by definition independent of our thought, since it actualizes our non-being.

We can therefore only think our possible non-being, and thus our facticity (as individual and as correlational structure) on condition of being able to think the absolute possibility of our no longer being – a possibility that is independent of our thinking, since it precisely consists in the annihilation of that thinking. Therefore there is indeed an effectively thinkable absolute, by the very admission of the correlationist; one that the latter can no longer refute, since he presupposes it – namely, the possible non-being of every thing, including correlation, an absolute we have designated as the mark of a 'hyperchaotic Time'. For, in order for the event of the abolition of correlation to be thinkable, it must be possible to think an event that, by definition, has no need of correlation to be effective. In which case, contingency, facticity and arche-facticity become one for us: we know that what is, could not be; and that what is not, could be. Things, people, events, physical laws, correlation itself: to be is to be determinate – to be this or that – and thus to be able to change without any reason whatsoever, in perfectly contingent fashion, within a Time capable of destroying every entity, whatever its mode of being. What we took to be a limit of thought – facticity – is an absolute and thinkable property of that which is.

What we call *factiality* is *facticity*'s property of not itself being factual. Factiality designates the non-facticity (that is to say, the absolute necessity) of facticity, and *of it alone*. We shall therefore call 'principle of factiality' the speculative statement according to which facticity alone is non-factual – or (what is the same thing) according to which only contingency is necessary. Such is the principle – that of the necessity of contingency alone – that governs the idea of a speculation that I call 'factial'.

The idea that I pursue is then as follows: I maintain that it is possible to derive non-trivial conditions from the necessary facticity of all things – absolute properties of that which is, whether or not we exist to think it. For I maintain – the whole interest of the thesis lies herein – that to be contingent, an entity (be it a thing, event, law or structure) cannot be just 'anything whatsoever', with no constraints. For example, if we define the inconsistency of an entity as a capacity to be universally contradictory, then it can be established (something I shall not undertake here) that this entity is absolutely impossible, because it would always already be what it is not, and would exist at the same time as not existing. Inconsistency is impossible, not because it is absurd, but because it would permit its bearer to be absolutely necessary – incapable of changing since it would already be what it is supposed to become; incapable of ending, since for it, 'to be is not to be'. On this basis, we must refuse the possibility of an inconsistent universally contradictory being, not because it would be illogical (this

would be begging the question), but because it would be absolutely necessary – the only thing absolutely prohibited to any reality whatsoever. I thus attempt to maintain two theses at once: all determinate reality can be other than it is (and is thus contingent); but contingency implies non-trivial and necessary properties, which I call Figures. My work thus consists, essentially, in deriving from the principle of factiality various Figures qua absolute invariants of the maximal variance accorded to every entity.

Now, to conclude this partial recapitulation of my ontological theses, I should like to try to counter a number of false impressions that you may have had in listening to me (or reading me). I must say, I always regret speaking in 'limited formats' such as those of an article or a conference paper, for I am obliged to go faster that I would like, and to give a rather brutal, even polemical, impression of investigations that, in my writings, are far more circumspect and, in all, rather 'urbane'. You may have got the impression that I maintain dogmatically an 'old fashioned materialism' that condemns every other way of thinking in the name of a rediscovered orthodoxy. You may perhaps also feel that my conclusion is rather banal, even retrograde; speaking of time, for example, rather than space – which has been far more in vogue since structuralism, Foucault and geophilosophy – an absolute that, apparently, has nothing innovative about it.

I would like, in what time (or space) remains to me, to move against such impressions, by insisting upon the at once 'strange' (non-classical) and 'nonintrusive' (non-dogmatic) character of the materialism I propose. Firstly, this materialism is strange in that it does not absolutize any determinate material reality: particles, forces, waves, space-time continua, probability waves, etc. These so-called 'material' (or at least 'physical') realities are contingent, as are the laws that govern them. What I call 'Hyperchaos' can destroy them without cause or reason, if everything is indeed devoid of necessity. Therefore I am not at all dogmatic in regard to what our world effectively is. I do not arrogantly base my thought on this or that contemporary state of science. This approach, rather than being the business of a rigorously-understood materialism, belongs to a certain 'naturalism'. Such an approach seems profoundly futile to me, because it makes itself dependent, each time, upon a state of science that has no more reason to be thought definitive today than it did yesterday. My proposal is entirely different: I affirm that the sole point of absolute exteriority that thought encounters is that of the radical contingency of our own world. Given this, the radical consequence is as follows: because I speculate upon the

⁵ I once again hesitated, at this point, on a lexical point: speaking of Hyperchaos in After Finitude, at one time I used for myself the term 'Surchaos' (as I said in an interview with Graham Harman), because the former term seemed to me to give the false impression that I had tried to think a chaos more disordered, more absurdly frenetic than those that had preceded it in various philosophical systems (the prefix 'hyper-' having acquired, wrongly, an intensificatory connotation in current language). Now, the Chaos that I envisage is just as capable of producing an impeccable order as a frenetic disorder – whence the idea of Surchaos, which refers to the ancient metaphysical order and the ancient chaotic disorder alike. But I resolved to commit a barbarism by mixing a Latin prefix to a Greek noun – whence the return to 'Hyperchaos' whose meaning, I believe, can be posited clearly enough to avoid any equivocity.

absolute, *I prohibit myself entirely from speaking of that which is*, not to mention that which could be. For that which is, is wholly contingent – and this, indeed, in a vaster sense than that of ordinary or transcendental contingency, which are restrained in various ways by physical laws or by the categories. According to me, anything whatsoever can happen – any world whatsoever can succeed any other. Now, the only thing that should interest the speculative philosopher is not what is contingent, but what is necessary. But, since nothing that exists is necessary, speculation should not speak of it at all – or only to awaken a reader's awareness upon this or that point (like the 'Arche-Fossil' in *After Finitude*, which was proposed only so as to problematize the contemporary self-evidence of correlationism). Speculation must speak only of those Figures (no doubt few and far between) that belong precisely to a contingency delivered of all constraints other than that (or those) of its own eternity.

Therefore, speculation assures all other disciplines of thought that they alone have the right to describe and to explain (in a non-necessarist form) the world in which we live. My materialism is so far from being hostile to empiricism, that in fact it aims to found the absolute necessity of the latter. My only disagreement with the empiricist is that I affirm that he is absolutely correct: If you want to know or to think what is, you must necessarily (from my point of view) do so by way of a certain regime of experience: scientific experimentation (the sciences of nature), historical and sociological experience, but also literary and artistic experience, etc. And here, my role is to prevent a certain philosophical regime from contesting the sovereignty of those 'disciplines of experience' I have enumerated. Now, what contests the sovereignty of these disciplines is what I call 'metaphysics', which I distinguish from speculation. For I call 'speculative' any philosophy that claims to accede to an absolute. But I call 'metaphysical' any speculation that claims to accede to the absolute according to a more or less extended modality of the Principle of Sufficient Reason. The Principle of Sufficient Reason consists, in its minimal form, in affirming that existent things have a necessary reason to be as they are rather than otherwise. If you accept this principle, the metaphysician will always be within his rights to dictate over what is, by claiming to contribute the necessary reason that makes it as it is -aposition that I call 'dogmatic' or 'absolutist', and to which I oppose an 'absolutizing' position, i.e. a speculative but non-metaphysical position; the factial position, which maintains the absolute falsity of the Principle of Sufficient Reason, and thus relinquishes any right to intrude, with its necessary reasons, into the sphere of what actually exists. So, my materialism is neither dogmatic nor intrusive: it does not say what the ultimate elements of this world are, nor does it claim to demonstrate in general that there is necessarily what there is (such and such a substantial body or perpetually creative becoming). On the contrary, it defends the exclusive right of experience to describe the inexhaustible intricacies of the real that make up our world.

Here we see a possible 'reversal' of my preceding positions, which should convince you that I am not at all an intolerant dogmatist, adhering to a certain old-fashioned materialism (a materialism that would be metaphysical rather than speculative in the strict sense). For consider the effects of the thesis according to which materialism must be speculative, and not metaphysical, and thus should be prohibited from speaking of what is, and content itself with speaking of the contingency of what is. We are materialists in so far as we obey the two principles that belong to any materialism: being is not thought, and thought can think being. On one hand, I establish that the being of every thing is its contingency – the fact that a being is rather than is not. In *After Finitude*, I try to prove (my 'materialist ontological

proof') that if contingency is eternal, then there must have existed for all eternity contingent beings – and not nothing. For contingency is nothing outside of what is contingent – it is not a 'free floating' principle, but always the property of determinate beings. I thus establish that something must exist – and not pure nothingness – and that this something is not necessarily a thinking thing. This something that does not necessarily think is matter in general – its determinate counterpart being this or that matter subordinate in fact to such and such a set of physical laws belonging to a given world. Matter can therefore be devoid of thought, of subjectivity, and can be described wholly by a mathematized physics – a physics that accords no subjective quality to the inorganic, and has no need to believe that matter always implies some kind of subjective existence. To *be*, entails nothing of being – not even an infinitesimal sensation of 'self'.

So that is the position of speculative materialism. But since this materialism, as I have said, is not metaphysical, it says nothing as to the factual being of our world. It therefore casts off the Principle of Sufficient Reason, in so far as this principle strives to seek necessary reasons for what is, reasons that *absolutely* do not exist, according to our perspective. Now, of course, the principle of factiality does not, for all that, prevent the men and women of science from explaining what is empirically given by means of causes and laws. If we are in fact governed by determinate physical laws, it is quite legitimate to seek factual causes and reasons that can explain everyday reality. I reject the metaphysical Principle of Sufficient Reason that seeks an absolute reason for the given, but not the various *heuristic principles* that explain our everyday facticity.

But we can take an additional step in this direction, approaching once again subjectalism's thesis of the universal subjectivity of reality. Recall that I rejected this thesis in so far as it claimed to found the absolute necessity of this subjectivization of the real, in the name of the correlational circle invented by Berkeley. But everything changes if this subjectivization of the real is put forward only as a mere hypothesis with which to explain our world. For, since materialism is not metaphysical, it does not claim to speak of our world. Now, nothing prevents the *hypothesis* that our world is *in fact* (quite contingently) steeped in subjectivity in its every nook and cranny. This hypothesis is certainly doubly pointless: pointless for science, whose mathematization of nature does not call for any such subjectivist interpretation of the world; and pointless for speculative philosophy, for which a non-subjective real is perfectly thinkable. This hypothesis can nevertheless be put forward according to a heuristic principle that would go 'beyond' the scientific explanation of our world, without touching on the speculative absolute of materialism. One would posit the hypothesis of the subjectivity of the real no longer as a metaphysician (claiming thereby to establish an absolute truth), but (to propose a new term) as a 'hyperphysicist' conscious of the contingent nature of the subjectivity thus investigated. I call 'hyperphysics' every theory that postulates a reality other than that investigated by science, qua heuristic explanation for the supposedly ultimate components of our world, itself recognized as one contingent world among others that are really possible. By dint of this, all hyperphysics (vitalist, idealist, spiritualist, etc.) become equally legitimate within their order; and speculative materialism has nothing against them. It simply reminds them that, qua hyperphysics, they are but nonscientific physics – that is to say, possible theories of that which, factually, is as it is.

Do not be deceived by the prefix 'hyper' in 'hyperphysics' – above all, it does not signify that such theories accede to what I call Hyperchaos. It means, on the

contrary, that they do not – since they speak only of the being that is, and not, like speculative thought, of the Being of that being (of its facticity, of the contingent fact that a being is this and not that). But these theories, bearing upon the same object as the old metaphysics (that is, nature) are held within the sphere of Hyperchaos: they result from the latter, in so far as they can no longer speak of their object otherwise than in a postulative (and not deductive) fashion. Contemporary hyperphysics (which, to my mind, includes Graham Harman's philosophy) can no longer deduce according to an absolute necessity that their object is such and such (subjectivity, made of will to power, image-movement, things withdrawing from their relation to other things, etc.). They can only *postulate*, and observe the greater or lesser adequation of this postulate to reality. And this precisely because they now only have access to a world of this or that fact – observable and not deducible. Thus, even if a hyperphysics is deployed, it can no longer maintain the old metaphysics' arrogance in relation to other discourses bearing upon what is (science, history, literature, etc.): its proposition is postulative, hypothetical, and without any foundation in necessity. Its interest is ultimately heuristic, without any possible assurance of being definitively true, for it touches upon nothing eternal within beings.

How about me – do I have a hyperphysical theory that I could adjoin to the speculative theory of the factial? To be honest, I try, as far as I am able, *not* to have one – because the world seems far more interesting to me that way. For, so long as I have no hyperphysics of my own – that I could add to factial philosophy as an advantageous complement to it – I still have at my disposal *non-philosophical* theories and discourses which tell me very well (in a movement that is continually reprised and recommenced) what is, in that which is. Now, allow me to make this observation: mathematized science tells me that one can give a comprehensive account (in principle, if not in fact) of inorganic matter through mathematics alone. But other discourses tell me (in accordance with my personal experience) that other fields of reality (animal life, human life and mind) add to this field of dead existence (dead not in the sense of static, nondynamic, but non-sentient) worlds of sensations, perceptions, volitions, etc. that are extremely rich and complex. Which implies the intervention of theories and discourses other than physics – biology, ethology, sociology, history, literature, etc.

If we posit that the inorganic real is non-sentient, we thus save ourselves the very complex task of adding to matter a very problematic sentient capacity; but above all, we discover, I believe, a world that is infinitely more interesting than the subjectivized world. For in this world of dead matter, it turns out that there is a radical ex nihilo emergence of realities (sensations, perception, etc.) that absolutely did not exist before, not even potentially (for the potential combinations of inorganic matter yield only physical complexes which never have any reason to supplement themselves with a regime of sensations). Now, here is my major point of rupture with ancient metaphysical materialism – in particular that of Lucretius: this ex nihilo emergence should not be rejected as a trace of superstition, but must be affirmed as the mark of the radical refusal of the Principle of Sufficient Reason – founded on the principle of pure contingency of every thing and of every world. So that what was the basis of ancient religiosity – that the soul cannot be produced by matter – becomes an argument in favor of the superior absurdity of Time, capable of adding to the real that which absolutely does not originate in it. Every 'miracle', as I like to say, becomes the experimental proof of the inexistence of God. And the apex of this rational absurdity (rational, but not 'reasonable' i.e. submitted to the Principle of Sufficient

Reason) is that these levels of reality irreducible one to the other are nevertheless – qua *pure supplements* – sufficiently *coordinated* one with another so as not to wholly destroy the relative coherence of our world. This is the enigma of all dualisms – an enigma that remains, and with it all of its religious overtones – unless we understand that *only ex nihilo* emergence is at once entirely rational and entirely immanent.

Therefore, I propose (but I am content merely to propose it, since in this matter there is no definitive argument) that we have done with replaying over and over always the same subjectalist argument (that there is a 'subject', or 'will', or 'perception' in all things, since we can conceive nothing outside of subjectivity), so as to render the world much richer than such models would have it. For these models are monist, even when they seek to be pluralist: in them, everything is uniformly subject, will, creative becoming, image-movement, etc. – and nothing can be distinguished except through differences of degree (sometimes rebaptised 'intensive differences') that tie together all things with the same, sempiternal identity of nature. I believe that we must, on the contrary, accede to the pure heterogeneity that breaks down all differences of degree or intensity in favor of differences of nature – the only authentic differences, those that do not surreptitiously reduce identity (of nature) to alterity (of degree). We do not need a monism – or a Deleuzian mono-pluralism, a 'monism=pluralism' that ultimately comes down to a 'pluralism=monism'. On the contrary, we need *dualisms everywhere* – pure differences in nature, without any continuity whatsoever between that which they differentiate, between numerous regimes of the real – matter, life, mind, society, etc. – whose possible co-ordination does not at all allow us to think their reconciliation, unless in the brute mode of blind facts. Not a mono-pluralism, but a poly-dualism. We need breaks that render impossible the reductionism of one regime of beings to another (life reduced to matter, mind to life, etc.), and permitting the entities of our world to escape magnificently every attempt to reduce the existents of our world to one unique nature (whether or not it is admitted as such matters little – the idea will still be the same whatever the denials). The heterogeneous turned against the intensive, difference in nature turned against difference of degree; the eternally possible poly-dualism of Hyperchaos against the pseudo-necessary mono-pluralism of Chaosmos.

But we must remark on a dissymmetry here: Chaosmos, and all the other monist and subjectivized worlds, are not excluded from the really possible effectuations of Hyperchaos – whereas Hyperchaos is categorically excluded as impossible by Chaosmos and other metaphysical subjectivizations. For, let us again insist, it is really possible that a world should come about that is as lacking in heterogeneity as the mono-pluralist world. It is even possible – why not? – that our world should be as unified in its diversity as the subjectalists think it is (one same subjectivity, indefinitely ramified, attenuated, diluted). We never claim, let us repeat, to have categorically refuted this hypothesis concerning what is. We leave to metaphysicians the belief that such a refutation could ever take place regarding worldly existents. But it could be (and speculative materialism gives us the right to hope for this) that the world is infinitely richer, more absurd, more cracked and dualized everywhere, than is dreamt of in the philosophies of subjectalist hyperphysicists or metaphysicians. And it is indeed in this way that I intend to understand our world, armed with the arguments that permit me to do so: in particular, the argument that the heterogeneous discourses, irreducible one to the other, that describe our world, need not fall under the general explanation of one among them. And I believe that these discourses (or those who hold to them) are quite right: they are right to refuse to think that there could exist a principal nature-being that would allow a determinate (meta/hyperphysical) discourse to have the final and general word on the beings of our world. For, luckily, the pure heterogeneity that, doubtless, governs these beings may quite plausibly explode, again and again, all unifying systems that concern themselves with things, rather then with the contingency of things alone. The extraordinary unforeseeability of sciences and arts will very probably always put an end to the substantial or processual syntheses of metaphysicians, by unearthing some devastating counterexample that destroys every overgeneralized picture of the real. Such is the work of the heterogeneous, smashing into a thousand pieces the smooth intensity that seeks to become too allencompassing. The intensive is in truth only ever ontic, secondary: it governs domains of determinate beings in which something can be what it is to a greater or lesser extent – higher or lower temperatures, more or less creative geniuses – but not necessarily the whole of the real, which, one suspects, is on the contrary fissured magnificently by differences in nature, abysses of discontinuity wherein we find vertiginous hints – scandalous for the old models of rationality that bowed to the Principle of Sufficient Reason – of emergence ex nihilo.

Let us turn (and here I will end this recapitulation) to the bond that exists between our absolute and Time (which I write thus, with a capital T). For me, what is called space can be thought like physical time, or any other ontic time (e.g. historical or psychological time): There are space-times within our world, bound to determinate laws – physical or otherwise. But all of these space-times are ontic – that is to say they are contingent beings, that emerge for no reason and can perish likewise. Hyperchaos is this capacity of (capitalized) Time to destroy or create, for no reason, all ontic space-times. And this Time so little resembles the ordinary forms of time that it is, on one hand, indifferent to every law, to all natural constancy (whereas time is generally understood as a becoming that can destroy only things and events, not physical laws); and, on the other hand, above all, radically distinct from becoming. Substance and becoming, which have, since Thales and Heraclitus, characterized two types of philosophies that we usually radically oppose to each other, are but two conceptual variants of metaphysics: either one affirms that certain substantial things are eternally the same, or that things must necessarily be born and perish according to underlying processes that are eternally the same. In both cases, one maintains that an effective x (thing or becoming) must be such and such (this substantial nature, this natural process). But hyperchaotic Time supposes, on the contrary, that substance and becoming are themselves existents – existents that could be born or perish for no reason. Not only (as we might expect) could every substance disappear, according to the principle of factiality; but becoming itself could perish, were Hyperchaos to create a world made of beings of perfect fixity, that perdured for a period that was de facto (not of necessity) indefinite. Becoming and substance seem both to be of the order of 'natured nature', and not 'naturing nature'. Now, it is rare (even unique, to my knowledge) to envisage thus a thinking of Time whose object is to devalue all thinking of becoming, and by the same token all thinking of substance. This is because the 'naturing nature' that I speak of is no longer a nature, a Cosmos, or a Chaosmos; but their possible destruction, genesis, and redestruction by a Hyperchaos that is their true principle. I take up arms equally against these two 'old things' of metaphysics.

To finish, I should like to insist on one point that has been largely underestimated in readings of *After Finitude*, even though it was one of the most fundamental points of the book: *I do not do metaphysics*, *I do speculation*. I am a

resolute anti-metaphysician precisely in so far as I speculate on the absolute. I am not in the least bit interested (at least qua philosopher) in *physis*, or in a *metaphysis*, for I see no necessity in the processes of nature. I do not do metaphysics to the exact extent that I seek only eternal truths – metaphysics yields only illusory ones, and hyperphysics knows that it will never find any. Such is the true peculiarity of my approach: a non-metaphysical speculation that we could call 'eternalizing', since it has no link to the natures that surround us and that may perish tomorrow, without cause nor reason. It is through this ascesis that I reserve, as far as I can, the richness, *all* the richness, of what exists, for non-philosophers alone.

2. Essay on the Derivation of Galileanism

I now come to the principal subject of this paper. It concerns the attempt to obtain a factial derivation that would legitimate the absolutizing capacity of modern science – that is to say, Galilean science, science that proceeds via the mathematization of nature. For what preoccupies me is the rediscovery of a Cartesian rather than a Kantian conception of experimental science. Rather than arguing that mathematics and physics only bear on the a priori forms of our experience, I am convinced – for reasons that I cannot fully explain here and which pertain to the 'aporia of the archi-fossil' discussed in Chapter One of After Finitude – that one must maintain, like Descartes, that mathematics and mathematized physics give us the means to identify the properties of a world that is radically independent of thought. Of course, we must admit (against Descartes, now) that every theory of the experimental sciences is revisable. But it is a matter of establishing that it at least makes sense to suppose that a scientific theory can identify a true property of reality, independently of our existing to think that reality. In this way, we would no longer, like the correlationist (whether Kantian or not), who affirms that the world is but the obverse of human (or animal) representation, have to perform more and more intellectual acrobatics to account for the scientific description of the Universe anterior to the appearance of terrestrial life. As modern sciences of nature are characterized by their mathematization, it is reasonable to suppose that their capacity to speak of a 'world without us' stems from mathematics itself.

My plan is thus as follows: I will try to exhibit a minimal condition, modest yet fundamental, of various contemporary formal languages – logical as well as mathematical. This minimal condition, as we shall see, has to do with our capacity to *think a meaningless sign*. I will then derive this capacity to think a meaningless sign from the principle of factiality, by showing that there is an essential link between this sort of sign and absolutized contingency. I therefore will have to show in what way this factial derivation of the meaningless sign allows us to argue that physics (or any other science of nature) must be based upon this absoluteness of the void sign in order to produce hypothetical (revisable) descriptions of the present world, capable, in turn, of being true in an absolute sense – that is to say, independently of our existence.

But in order for these propositions to be clear, I have to distinguish between two senses of the word 'absolute'. In the first, 'absolute' refers to a property that is necessary for every being – such a property is absolute in the speculative sense. Thus facticity, and the logical consistency derived from it, are absolutely necessary and infrangible properties of every being. These types of properties, absolute in the first sense of the term, I call *primo-absolutizing* properties. On the other hand, I identify a second sense of the word absolute, this time concerning the reference to the natural sciences: this second sense designates properties of the world that I do not posit as absolutely necessary, but as facts which, as to their existence, are *radically* independent of thought. To say it more clearly: the laws and constants described by the natural sciences are not, for me, necessary – like every thing, they are subject to that superior regime of Time that I call Hyperchaos. But I would like to show that these laws and constants are not, for all that, mere correlates of thought; that they are (presuming they are described by a true theory) absolute in the primary sense of absolutus – separate from us, independent of the thought that we have of them. Contingent, of course, but independent of our existence for their perdurance. These

properties of the world, absolute in the second sense of the word, I call *deutero-absolutizing*: a property of independence vis-à-vis the human, implying no ontological necessity.

My objective can thus be formulated as follows: to prove the capacity of experimental sciences to produce deutero-absolutizing statements, and to do so via an appropriate factial derivation. To demonstrate that mathematics permits physics to produce revisable hypotheses (perhaps false in the light of future discoveries, but perhaps true for all time) pertaining to the contingent givens of a world independent of us as regards its factual existence. If I succeed, we will have arrived at an understanding of the remarkable capacity of sciences to describe the Universe as it existed anterior to man and to the living, and, doubtless, will exist after they have gone.⁶

The stakes, in more graphic terms, can be formulated as follows: can we found the capacity of mathematics to grant us access to the Kingdom of death, and then to return so as to recount to the living the discoveries of our voyage? The principle of materialism is infernal: it supposes that the Hell of the inorganic world – those deep, subterranean realms where life and subjectivity are absent – can nevertheless become the object of human knowledge. This pure other of ourselves that is death is available, for the materialist, before death, in the form of a knowledge of what we shall be when we are no more. In After Finitude, the factial began to open this breach towards the without-life in the form of universal derivations – such as that of the contingency and the non-inconsistency of every existent, whether subjective or non-subjective. But nothing was said, in these primo-absolutizing statements, of the factual determinations of our world, or of the characteristics of its dead matter. This is the task of Galilean science: not to tell us what is the universal property of every existent, but to tell us what death looks like in our world. To found this exploratory power, this leap into the gulf, is indeed to found the deutero-absolutizing capacity of mathematics

* * *

_

⁶ Here we encounter a second reservation in regard to the various contemporary hyperphysics that proceed via subjectivisations of the inorganic: the latter, as we have said, are constrained to posit the subjective nature of all reality, otherwise they would fall back into the rut of metaphysics.

For my part, I will try to put forward the argument (we shall see what difficulties this entails) according to which a mathematicised discourse can legitimately describe a fact independent of us. Now, I am incapable of producing such a demonstration for a non-mathematicised discourse, pronounced in natural language alone. Thus, in terms of factial derivation, I cannot surpass correlationism concerning any qualitative reality, described by a natural (non-mathematicised) language. This is why, in the sphere permitted by factial derivation, the real (present) world is for me only accessible through a Galilean science. This absolutely does not refute the idea that every reality in our world is in fact subjective, but reinforces the contrary hypothesis, by giving it additional rational backing: I can decree the subjectivity of the inorganic real only by *hypothesis*; but I can establish by way of a *proof* the capacity of mathematics to describe this same inorganic real.

The resolution of the problem that I set myself was formulated in a discouragingly general way, but inevitably so: I needed a specific criterion of logicity and of mathematics. Not a criterion of rationality in general – the consistency whose derivation I sketched out earlier is a criterion of all rationality, in formal and natural language alike – but of formal languages alone. A criterion at once general enough (modest enough) to belong to mathematics as such; yet specific enough to apply to it alone, and not to natural languages. If I were to find this differentiating criterion that characterized formal languages alone, then it would have to harbor, if I am right, a use of language that depends in some notable way upon the absoluteness of contingency. This specific dependence upon contingency would then be capable of founding the absolutizing character of mathematics, and consequently of experimental sciences formulated through the use of mathematics.

In other words, before verifying whether logico-mathematics does indeed rest upon an implicit intuition of eternal contingency, I would have to discover the criterion by which we can differentiate decisively natural from formal languages.

Now, the solution appeared to me precisely in the name that is given to modern logic and mathematics: they are called, as I said, *formal* languages – that is to say, languages that originate in the formalism that took hold in logical and mathematical writing from Hilbert onward. Hilbert's formalism has been much discussed, along with its potential limitations (we think of the failure of the Hilbert program, as demonstrated by Gödel's proofs on the incompleteness and undecidability of certain axiomatics). But, as you will see, I take up only a very small part of this formalism (albeit the most interesting part) – a part that has never been seriously contested by later mathematics.

So, in what does formalism in mathematics generally consist, if we limit ourselves to its most elementary expression?

Let's begin with an example, which will accompany us throughout the whole discussion, since it is the easiest one for me to explain: that of set theory in its standard axiomatic form, so-called Zermelo-Fraenkel set theory. I would add, however, straight away, that the same considerations apply to category theory, which is in many ways more powerful than set theory, and which finds more favor with contemporary thinkers.

This axiomatic is formulated in a first-order logic, that is to say one whose quantifiers ('For every', and 'There exists') bear only upon terms ('individuals') and never upon properties. Thus, it uses five types of sign: variables (which are placeholders for individuals of the predicate calculus), logical connectives (negation, conjunction, disjunction, implication, equivalence), quantifiers (universal, existential), relations (equality and belonging), and punctuation (parentheses, curly brackets). It is with these signs alone, and those that can be defined with them, that set theory formulates its axioms (which are eight in number, if we include the axiom of choice and the axiom of foundation) and its theorems. Set theory, as we know, 'has progressively become the general axiomatic framework in which mathematics is written' (Jean-Louis Krivine). For this is a theory capable, notably, of constructing both numbers (ordinals and cardinals) and functions (which are a certain type of set, a set of ordered pairs) – and thus a theory that is 'foundational' for mathematics

(foundational in a non-philosophical sense), in that it constructs its two principal objects: numbers and functions.

On first sight, set theory consists of an axiomatic in the sense inherited from Euclid's geometry: a minimal set of statements on the basis of which all others can and must be logically deduced. But this axiomatic differs from Euclid's in so far as it is a formal axiomatic, in a sense that principally stems from the work of Hilbert. In what does this formalism consist, and in what way does it characterize contemporary axiomatics?

In the axiomatic as inherited from Euclid, the definition of terms precedes postulates and axioms. For example, the three first definitions of Euclid's Elements (with which Book I opens) begin by defining the point, the line and the limits of a line: the point is that which has no parts, the line is a length without width, and the limits of a line are points (which have already been defined). It is only once these definitions have been made that we get the postulates (unproven or nondemonstrable principles that utilize in their formulation the terms precedingly defined), and the axioms (nondemonstrable principles concerning the relations of the whole and its parts).

Before stating the principles (statements posited as true), a Euclidean axiomatic thus puts forward definitions of the terms used in the proofs or in the postulates. Now, what is specific to a formal axiomatic, that with which it breaks with the Euclidean-type axiomatic, on the contrary bears upon the fact that *one does not begin with any initial definition*. In the axioms, one posits relations between terms that themselves are not defined. Consequently, I would argue that we must clearly distinguish two types of sign, which I shall call 'base-signs' and 'operator-signs'.

To explain this difference, still with reference to set theory: The base-signs in set theory, are the individual constants and variables, generally designated by the Greek letters: α , β , γ , etc. or the letters of unknowns: x, y, z, etc. These terms are named as sets: but to *name* them, we cannot insist strongly enough, is not to *define* them. In set theory, we never get involved in defining what a set is: we are content to designate with a non-defined sign what an interpretation of the system might designated with this name – without this nomination at all influencing the formal system under consideration.

It is this that we call 'set': a sign, itself devoid of meaning, and *a fortiori* of any reference. And this is the initial object of mathematics, in so far as the latter is 'founded' on set theory: the pure and simple sign that refers only to itself.

The second type of sign, which I have called the operator-sign, designates various operations that will be able to be carried out on the base-signs: logical signs (implication, conjunction, disjunction, equality), along with properly mathematical signs. In fact, set theory adds to the logical calculus only the signs of membership $(\not\in)$ and non-membership $(\not\in)$.

It is through the intermediation of the operator-signs – in particular the membership sign, and the axioms that prescribe its usage – that one can rediscover intuitively certain properties that relate to those of ordinary sets. For example, the axiom of extensionality gives the condition of the identity of two symbols: a and b are identical sets if they have the same elements. This is a rule of substitution of one set for another, given that they are entirely determined by their elements alone. But this axiom does not define what a set is, any more than the others do. It only exhibits the

condition of the identification of two sets, without giving any meaning to what is thus identified. Moreover, such a definition is impossible in set theory, for one simple reason: a set is nothing other than that which can have other sets as its elements (an element of a set is in fact always another set), or which can be a member of another set. As we can see, what characterizes a set cannot give rise to any definition – except a circular definition supposing in its formulation that which is to be defined.

It is therefore very much as if the base-signs progressively acquired properties that conform (more or less) to their initial nomination. But they do not do so through an initial definition; they do so through the *effect* that the operations they make possible can have upon them. The base-signs (which are meaningless signs) acquire an 'apparent density' that is but the effect of the froth of the ever more complex operations that they can support, without themselves ever departing from their absence of originary signification. In a formal axiomatic, one must thus avoid being led astray by the appellations that only give names to the base-signs: names, and not meaning.

Thus the axioms are not definitions – or even 'definitions in disguise', as is sometimes suggested. They are not definitions at all: it is an entirely other matter, a matter of the substitution of a *relation* for a definition. Coming back to set theory, we observe that the predicate 'to be a set' simply does not exist, whereas sets, on the other hand, can receive numerous predicates (ordinal, cardinal, empty, infinite, etc.). The base-sign thus never acquires the meaning of the word 'set' as formulated in natural language. But the remarkable point here is that mathematics turn out to be capable of producing statements that *do* have very rich signification, on the basis of operations upon such signs that remain empty of meaning. For if it always remains impossible to define what a set is, it is wholly possible, in the ZF axiomatic, to differentiate between sets, and thus to construct remarkable sets: for example, the empty set, defined as the set of which no other set is a member, and on whose basis one can construct the whole succession of ordinals, the source of all numeration.

From what we have said so far, we can draw a precise principle of distinction between a natural language and a formal language: for we can decide *to differentiate them according to the role that meaningless signs play within them.* We shall therefore say that a formal language, unlike a natural language, accords a structural role to the meaningless sign – at least on a *syntactical* level. For alphabetical natural languages do indeed make use of letters and syllables that, in themselves, have no

_

What I say here is, to my mind, valid for every formalism, logical or mathematical. We could easily rediscover the difference between base-sign (meaningless sign) and operator-sign in Category Theory: the latter is written using arrows (the equivalent 'operator-signs') applied to 'point' signs, which are devoid of meaning (named by letters – the equivalent 'base-signs'). These 'points' are but the supports for arrowed operations that give them all their properties 'from outside', and they are in themselves so perfectly void of signification that they are even eliminated in certain notations: the arrows are thus simply 'named' by letters at each end, and seem to be deployed between 'empty points'. Rather than saying that an arrow goes from point a to point b, we seem to say instead simply that this arrow 'ab' is oriented according to its own nomination. This is the ultimate – and logical – degree of the voiding of the base-sign.

meaning – but they do so on the morphological level of the constitution of words, and not at the syntactical level of the constitution of phrases. On the syntactical level, a natural language can certainly also use meaningless words – for example Mallarmé's 'ptyx', if we agree that this word means nothing – but there is no rule that *imposes* this type of word upon natural languages. Their propensity is, on the contrary, to avoid them so as to fulfill their ordinary function of communication. Within a natural language, at the level of syntax, the meaningless sign plays a contingent (and, in general, marginal) role; whereas in a formal language, at the same syntactical level, it plays an essential, structural role.

These two different usages of meaningless signs allows me to distinguish between what I shall call *formal meaning* and *ordinary meaning*. Formal meaning, in my definition, is the rule-governed use of meaningless (or non-signifying) syntactical units. The (negative) property of ordinary meaning in natural languages is the *absence* of the rule-governed use of syntactical units devoid of meaning. Thus, my object becomes more precise, for I can make the following hypothesis, which can be formulated very concisely: my aim is to show why *formal meaning, and it alone, is capable of producing deutero-absolute truths*, whereas ordinary meaning is incapable of doing so. It is precisely because hermeneutics has access only to the regime of ordinary meaning that it cannot accede to any speculative absolute; only a philosophy capable of thinking formal meaning and its crucial non-signifying aspect can hope to extract it from a thinking of finitude – a thesis that implies that I ought to take a closer look at this remarkable condition of formal meaning: the meaningless sign.

Before tackling head-on the problem of the status of the non-signifying sign, we must have in mind a sufficiently current idea as to the relation between philosophy and formal languages. A widespread thesis claims that to conceive formal languages as the operatory manipulation of empty signs is to grant license to all philosophical speculation and, more specifically, all ontological considerations. This thesis is found as much amongst mathematicians as amongst philosophers. On behalf of mathematicians, Jean Dieudonné, for example, says that when the mathematician is attacked by philosophers with paradoxes, he hides behind formalism, maintaining that 'mathematics is nothing but a combination of symbols devoid of all meaning'. It is thus implicitly understood by the mathematician that the empty symbolism of mathematics is a way of neutralizing any ontological question or aim.

Faced with this reaction of the mathematician, the philosopher seems to have the choice between two options: either he agrees with the definition of mathematics as 'combination of symbols devoid of all meaning', and resigns himself to the fact that it is futile to seek an underlying ontology of mathematics, since mathematics is identified with a pure manipulatory technique of empty signs. Or else he tries, on the contrary, to pierce the mathematician's formalist defense, by extracting an ontology masked by the appearance of empty signs – and does so by contesting the absence of real meaning in these base-signs; by discovering their hidden meaning and referent.

We see the alternative: either mathematics is the pure manipulation of empty signs, and excludes itself from all ontological consideration; or it supports an ontology, and does not ultimately rest upon a resource of meaningless signs, but on

-

⁸ 'The Work of Nicolas Bourbaki', *American mathematical monthly*, 1977 p145. Cited by Jacqueline Boniface in *Hilbert et la notion d'existence en mathématiques* (Paris: Vrin, 2004).

signs whose hidden meaning must be discovered. For example, it will be said in Badiou that the signs called 'sets', however non-defined, do indeed designate that remarkable ontological referent that is the 'pure multiple', the set all of whose elements are also sets.

Now, I maintain a third thesis that refuses the alternative that the two previous positions present: rather than seeing in the manipulation of empty (meaningless) signs an exclusion of ontology, I seek to constitute *an ontology of the empty sign* – and I affirm that the singular ontological import of mathematics proceeds precisely from the fact that, unlike ordinary meaning, it makes systematic use of signs that are effectively devoid of all meaning.

In other words, I propose to examine the ontological import of mathematical formalism as such; precisely in so far as it exhibits what is an essential characteristic (in any case, this is my hypothesis) of (logico-) mathematicity itself. I am convinced that an essential part of the enigma of mathematics – in what does mathematics consist? what does it speak of? – turns upon the elucidation of the following question: how *can we* think a meaningless sign? And what exactly do we do when we produce such a notion mentally? My thesis will be that we make an eminently ontological apprehension when we do so.

Let us therefore pass on to the central question of our discussion: What is a meaningless sign? The first thing I believe must be clearly maintained – for it does not go without saying, even today – is that a meaningless sign *is* still a sign. I mean to say that a sign empty of meaning is an authentic sign: it is no less a sign than a sign that signifies something. This simple remark, which I shall justify in a moment, is enough to distance us from most modern analyses of the sign, which, setting out from the linguistic sign or index, do not conceive of it outside its capacity *to refer to something*: to a meaning, an object, a reference. The linguistic sign, in Saussure, cannot be thought outside the indissociable correlation of a signifier and a signified. The sign, in Peirce, is thought as referring to an object through the intermediary of an interpreter. If one holds strictly to such an obligatory correlation of sign and sense, one will refuse to maintain that a sign empty of all sense is really a sign – above all if its role is syntactical (if it has the status of a word and not that of a letter).

However, what mathematical formalism teaches us is that there does indeed exist a form of sign, and one whose function is essential, that refers to nothing other than itself as sign; a sign that is not the index of any reality outside of it (like the tracks that tell us that an animal has passed by) and that does not articulate within it a signifier and a signified. A sign that neither signifies nor denotes anything; that refers to nothing. But what the formalist revolution must also convince us of, is that a rigorous theory of the meaningless sign must not only incorporate the empty sign into semiotics, but that it should in fact *begin* with the examination of this type of sign.

to unify logical and mathematical decisions); and I have no need, unlike Badiou, for example, to posit a *philosophically* essential difference between them.

⁹ I do not make any fundamental distinction, from the ontological point of view (I emphasise: only from this point of view) between logic and mathematics. The fundamental gesture, for me, resides in the formalism of the notation common to both. We observe, moreover, with Category Theory, that the demonstrations of these two regimes of proof ceaselessly cross over one another (categorial Universals being able

For the meaningless sign is the most elementary form, and thus the most fundamental form, of the sign: the form of the pure sign, delivered in person to our attention, as sign, before the intervention of meaning. The empty sign, qua true sign, uncovers for us the remarkable fact that meaning is contingent in the constitution of the sign; that the sign has no need of meaning in order to be a sign – and that semiotics (the study of signs) intervenes before semantics (the theory of meaning), and independently of it; for it concerns a domain that is autonomous from the latter: the domain of the non-signifying sign.

By affirming that the meaningless sign is indeed a sign, I wish to break with a widespread philosophical conception that denies that the sign remains a sign if it has no meaning. This conception is one that is generally subscribed to, but rather vaguely. However it is detectable any time a philosopher thinks that it goes without saying that if a sign is devoid of meaning (or of signification, there is no difference here), then it is reduced to its material support: a trace of ink on paper, a sound wave, or, we might say today, liquid crystal visible on a screen. The very expression *flatus vocis* to designate an expression or a word devoid of meaning implies this presupposition: for *flatus vocis*, the 'breath of the voice', is nothing but a sound. Remove the meaning, it is suggested, and all that remains is the sound, and not the sign. In other words, the suggestion is that the immaterial part of the sign resides wholly in its meaning, and that if this meaning is removed from the sign, the latter is reduced to its physical part alone – like a body deprived of its soul.

Against all reduction of the meaningless sign to its material basis (sound or mark) we must maintain that there exists in the very sign itself a stratum of immateriality that not only has nothing to do with meaning but that precedes it, conditions it, and can exist independently of it. But in that case, in what consists this immateriality independent of meaning? This nonsemantic stratum of semiotic immateriality is indeed known to linguists – and there is an abundant literature on the subject. The way it is spoken of therein gives us to understand that there exists in the sign a duality that is not that of the signifier and the signified, but that of the type and of the occurrence (or the difference type/token). A sign – for example, a written sign – is never just a mark on paper that you have before your eyes; for when you see a mark as a sign, this mark ceases to be only a mark, that is to say a singular material thing, and becomes an occurrence of a sign-type. When I write the letter 'a' three times, I write three occurrences of a type that itself is unique – the letter 'a' in general, as instantiated in the occurrences proposed, without, however, being reducible to them. In other words, when you see a mark as sign, you see the limitlessly-reproducible occurrence of an intangible sign-type. If I take the 'a' as mark, I am dealing with only an individual material thing. If I take it as an occurrence, I see in it the essentially unlimited number of its possible reproductions under the aegis of a type that, itself, is always identical to itself. Now, this *potentially* limitless reproduction of the occurrence obviously has nothing to do with the material of the latter. If we ask a factory manager to reproduce a standard widget that we present to him, he will evaluate the quantity of materials necessary to manufacture it, and the possible speed of production given the technical and human means at his disposal. But faced with an occurrence, a 'token', the envisaged possibility of its reproduction is not at all linked to the technical and energetic capacity of humanity. I have no need to evaluate the stock of material 'a's that humanity could produce so long as survives, in order to see the occurrences of a as reproducible 'at will'. Thus, the duality of type and occurrence is constituted by a possibility of reproduction that is essentially immaterial. There is

indeed in the 'signifier' – independently of the 'signified' – an *internal* articulation (occurrence/type) that differentiates it from the sole material support of the sign, without for all that appealing to the immateriality of meaning.

This distinction, as I have said, is not at all new; it is well-known, in fact – at least since Peirce, who thematized it in the form of the distinction between 'sinsign' and 'legisign' – and, as I said, there is a considerable literature on the subject. But (without claiming to have been able to exhaustively review this corpus) I have only found two points to which I would like to draw your attention. The type has given rise to many theories concerning its status: ¹⁰ Does it belong to the universals – that is to say, is it a property? Or is it rather an abstract object, like a number or a class? Or is it a genera? This is the kind of discussion that the notion gives rise to – without any definitive agreement having been reached on the subject, as we might expect. Now, what I find unfortunate in this type of debate is that it speaks of the type-sign in general: that is to say, without making the prior distinction between the meaningful sign and the meaningless sign. But I would argue that, if one wishes to speak of the type under the best possible theoretical conditions, then it must be treated 'in the pure state'; one should therefore begin by divesting it of every other form of immateriality within the sign – that is to say, one should examine it in a sign devoid of semantic content.

I thus propose a neologism to distinguish the type that interests me and that I am going to discuss – that is to say, the type in its pure form, the type of the meaningless sign. Drawing on the Greek adjective 'kenos' meaning 'empty', I call this type of empty sign the *kenotype*. And so my question will be: How can we grasp a kenotype; or: How can we grasp, within a mark itself, the duality type/occurrence of an empty sign?

The second aspect that I find lacking in these types of discussion is what I consider the major theoretical interest that there is in bringing together the problem of the ontological status of the type with the question of formal languages. For me, this convergence of problematics is a priority, and in fact in it are concentrated the entire stakes of the question of the type in general. The meaningless sign constitutes the junction point between the formalist refoundation of mathematics and the philosophical discussions on the ontology of the type-sign. For this crossing of problematics — a crossing of the theory of the type/token and of mathematical formalism — allows us to exhibit the possibility of an ontology of the meaningless sign, and thus to conjugate an ontology of mathematics with the definition of the latter as the manipulation of empty signs; two theses which are usually said to be mutually exclusive.

So, let us take up our analysis of the empty sign once more. The grasping of a meaningless sign implies, as we said, its division into (keno)type and occurrence. I argue that this division of the empty sign into a material part (the ink mark, the sound) and an immaterial part, also distinguishes it (at least in our apprehension of it) from an individual thing. But a new objection emerges right away: Can't I identify this

_

¹⁰ On this subject, see Linda Wetzel's article 'Types and Tokens', *Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu.

type/occurrence duality with that banal duality that runs through every thing, between its individuality (this chair, here and now) and its concept (the immaterial concept of the chair)? This is obviously the first question we must discuss – and the first objection that will be made to us: that the kenotype is no more than the concept of a sign considered as mark, as a thing of this or that form.

Let us formulate this objection more precisely: When I direct my attention to a material chair qua chair, I certainly grasp a certain duality: this chair here, that I perceive here and now, and at the same time the concept of chair, which contains an indefinite number of possible instantiations. When I direct my attention toward a meaningless sign, we might therefore think that its type/occurrence duality is nothing more than the banal duality between an individual material form, perceived here and now (the form of the 'a' that I perceive on the paper) and its concept (the concept of 'a', considered as a certain type of loop form characteristic of a certain type of letter). Thus, the kenotype is nothing more than a concept: the concept of 'a' that is instantiated by this or that material.

I believe, however, that there is a precise problem that prevents us from seeing the kenotype as a concept: namely, the *arbitrariness of the sign*. The expression is a famous one, but misleading in this case. Because by this expression, I do *not* mean arbitrariness in the Saussurian sense. In Saussure, the arbitrariness of the sign designates, as we know, the unmotivated character of the sign *with regard to its meaning*. In other words, the arbitrariness of the sign in Saussure means that there is no 'internal' (natural or necessary) bond between a signifier and its signified: 'the idea of "*soeur* [*sister*]", writes Saussure, 'is not linked by any internal relation with the series of sounds *s-ö-r* that serve as its signifier', and could thus be represented by any other series of sounds – as we can very well see from the example of foreign words that express the same idea.

But for my part, I am interested in the signifier *before* its link to the signified; and therefore I am interested in an arbitrariness of the sign defined independently of its relation to meaning. In short, an arbitrariness more fundamental than its unmotivation (this is what I call arbitrariness in the Saussurian sense: the non-necessary link between sign and meaning).

What do I mean, then, by the 'arbitrariness of the empty sign'? In what way is an empty sign arbitrary, if 'arbitrariness' is no longer linked to its relation to a meaning? Well, simply in so far as the function of the empty sign can be fulfilled by *any sensible mark* – limited only by practical or pragmatic concerns. It is certainly more practical to write a formal language whose variables are letters of a normal or traditional (Greek) alphabet, but any mark whatsoever – and even any thing whatsoever – could in principle fulfill the same role.

Imagine a mathematician on vacation at the beach, who decides he wants to explain to his child the bases of formal set theory: he might trace out some formulae in the sand – but he could just as well use shells as base-signs, so as to explain things in a more playful manner. In which case, we can see very well that the same material entity – in this case, a shell – could be seen now as a thing, now as a sign. The arbitrariness is present even when no meaning is mobilized in regard to the base-sign.

But we also see here the great difference between the duality concept/instantiation and kenotype/occurrence: When I see the shell as an empty sign,

I in fact perceive it at the crossroads of two unlimited series: firstly that, evoked above, of the kenotype-one and of its occurrences (unlimited in number). Now, this first series already distinguishes the shell-sign from the same shell grasped according to the duality thing/concept. For the concept of a thing is doubtless in itself infinitely reproducible; but in its content, it does not necessarily imply the possible infinite proliferation of that which it conceptualizes. A concept can, on the contrary (and whatever Spinoza may say) contain the idea of a definite number – of a defined plurality, or even uniqueness: the concept of the Venus de Milo implies its uniqueness, the concept of the current King of France implies its numerical nullity, and the concept of this or that shell implies, doubtless, a largely indeterminate multiplicity, but necessarily a finite number – and if the shell is very rare, perhaps a relatively small number. There is nothing of this in the multiplicity of occurrences of a sign: for the latter refers to no real, empirical multiplicity, but always to a possible multiplicity, and one without any limit. It belongs to the shell-sign to be able to be limitlessly reproducible, and not to belong to an endangered species, or to be suffering from marine pollution, as the shell grasped and conceptualized as this or that thing might be. Thus the sign does not at all conceptualize its material basis – that is to say, the mark that is grasped as an iterable occurrence.

But it will perhaps be said that the occurrence-shell does depend to a certain extent upon the thing-shell. For if the species chosen by our mathematician were to become rarer and finally to become extinct, it would no longer be possible to use it on the beach to initiate children into set theory. Now, here the *second* unlimited series inherent to all signs comes in – a series that is precisely linked to its arbitrariness: namely, the unlimited series of possible *recodings* of the sign. If the sign is arbitrary, before all relation to any meaning, it is by dint of this that it is always, in principle, possible to replace it with *another* sign, another iterable mark, that would have exactly the same function. A sign is manifested to us as one sign among a multiplicity of others, each one capable of replacing it in the same function. This is why the sign that is used *is not essentially or conceptually linked to the form that it takes for us* – unlike the shell, whose concept is obviously linked to its particular nature as an organic being.

But one could still make the following objection: that the mark or the shell are indeed grasped through a concept – not that of the shell, or that of some mark or other; but through the concept of the sign in general (or even the concept of the empty sign). It will then be said that it is the very concept of the sign itself that allows me to mentally iterate identically. Because such a concept can in itself be reproduced ideally, but also and above all because the content of the concept of sign supposes its unlimited multiplicity, since the *meaning* of 'sign' is to be an iterable mark. But, once more, this cannot be so. For the concept of empty sign identifies equally every empty sign as being, identically, an empty sign in general. Now, I can perfectly well produce a multiplicity of distinct empty signs – I can produce replica occurrences of distinct sign-types. For example, in set theory, a series of ocurrences of the type-sign α is not identical to a series of occurrences of the type-sign β (so long as the set α is not posited as identical to the set β), whereas both are posited as equally empty signs at the beginning of an axiomatic. Now, if the iterability of α and β depended solely on the concept of the empty sign, it would be impossible to think a difference between a and β , reduced to their identical absence of signification.

Series of occurrences of distinct type signs (series of signs a, b, c, equally empty) thus cannot be differentiated by way of the concept of sign (or of empty sign),

for the latter subsumes them all equally under its generality. I cannot rationally account, by way of the concept of the empty sign, for the typical (kenotypical) plurality of empty signs – and therefore I cannot rationally account for the iterative thinking of the sign through any concept.

The enigma becomes yet more precise: an empty sign possesses an immaterial property of identical reproduction. But since it is arbitrary, no concept can capture its essence – it is infinitely variable in principle with regard to its form, and this form has no necessity in itself. And since I can posit distinct types of empty sign, its iterable identity is no longer that of the general concept of the meaningless sign.

Does this mean that the sign is a pure convention that rests only upon the arbitrary identification of various marks? The word 'convention' only masks the problem here. For either the convention identifies distinct *signs*, and in this case it presupposes the notion of sign; or the term 'convention' signifies that I identify two distinct *things*, and in this case, does not yield the unlimited iterability of occurrences. To conventionally identify a material individual x with a material individual y does not produce, in addition to the duality of x and y, their unlimited iterability.

Amongst the solutions that we can draw from familiar categories, there does however remain one last track: that of simple empirical and conceptless resemblance, of the simple sensible recognition of the same form. We can observe a resemblance between two entities without necessarily knowing their concept – as when we observe the similarity between two pictorial motifs on an abstract canvas. Is it not an experience of this kind that corresponds to the recognition of a mark as an occurrence of an empty sign?

But here again, empirical resemblance is insufficient to constitute the iterability of the sign: to observe a resemblance does not imply that we make of the similar beings the replicas of a series posited as potentially unlimited. When we observe the resemblance between twins, we do not make of them occurrences in principle of a same type-sign signified by 'twin'. This is what we do, however, when we read twice upon the same page the word 'twins' – *a fortiori* when we recognize the occurrences of a base-sign in a formal language.

But we must be yet more precise. For, on the other hand, we certainly cannot acquit ourselves of all relation to the sensible recognition of forms in the perception of the sign. A sign must indeed be seen or heard, and one must perceive in its matter a form more or less similar to that which one knows, in order to apprehend it as a sign (or, if you prefer a structural formulation: I must perceive a set of sensible differences in order to recognize a system of signs). *Empirical* recognition is thus *necessary* for the grasping of the sign – necessary, but not sufficient. We must therefore conclude that two empirically similar marks carry with them *two types of sameness*: the sameness of sensible similarity, and the sameness of iterative identity. How to think the coexistence and the articulation, in the same material reality, of these two regimes of the same?

It is essential to elucidate this point in order to implement our derivation of the empty sign. To formulate it with more precision and clarity, I have made up a little fable, which I call the fable of the 'contented paleographer', and which will allow me to bring to your attention a mental experience that I believe to be very instructive as to the nature of the sign.

The Fable of the Contented Paleographer

Imagine a young archaeologist, working on an excavation site belonging to a civilization of which, as yet, very little is known, but which it is believed had no writing. Our researcher in the field is working at digging up a tablet. Now, when this artifact begins to come to light, she discovers upon it, suddenly, two superposed lines each made of similar marks:

\$\$\$\$\$\$\$\$ ++++++++

At first she believes these are similar *motifs* of a *frieze* decorating the edge of her tablet. But suddenly, her heart leaps: for she realises that this frieze might in fact be two *lines* of signs – the equivalent of a child's schoolbook, in which one learns how to write a character. She now grasps the motifs as occurrences reproducible at will:

\$\$\$\$\$\$\$, etc. ++++++++, etc.

The question, then, is as follows: what happened when her vision changed – from the grasping of the marks as motifs, to the grasping of marks as occurrences; from seeing a frieze to seeing a double line?

We must make several preparatory distinctions: I call *similarity* the perfect empirical resemblance of two empirical entities, and I call *dissimilarity* an empirical difference that can be distinguished at the level of ordinary perception. I thus suppose, for the sake of the simplicity of the demonstration, that each of the marks on the same line on the tablet are similar.

My thesis is as follows: there is a difference in nature between the two ways of seeing the marks, that of marks as motifs, and that of marks as occurrences. But above all, I will show that this difference can be isolated without needing to mobilize from the outset the mental proliferation of occurrences, as opposed to the finite grasping of the frieze. For one can go further in the analysis by going back to the very source of the unlimited proliferation of the occurrences – by going back to their raison d'être. We shall come closer to the enigma of iterability by understanding whence precisely comes the difference between the apprehension of the frieze and the apprehension of a line.

To do so, we must begin by remarking that, within the two ways of seeing — without taking account of the 'etc.' of the occurrences — a *sensible* difference is present. It is that the frieze, even though constituted of similar marks, produces a *sensible* difference. This difference, however, is *not a dissimilarity*. This sensible non-dissimilar difference, produced when the marks are seen as motifs, I call a *repetition*,

or a *monotony*. It is that differentiating effect of repetition that is *annulled* when the marks are seen as occurrences – and, as I just showed, it is precisely because seeing them as occurrences annuls all sensible difference between the marks (that of dissimilarity and that of repetition alike) that it allows one to grasp an unlimited iteration.

Let me explain what I mean by 'repetition' or 'monotony'. One can distinguish two principal modalities of repetition: an auditory modality, which produces what I call a *threnody effect*, and a visual modality that produces what I call a *frieze effect*. Let's begin with auditory repetition. It is Bergson's 1889 *Essay on the Immediate Givens of Consciousness* ('*Time and Free Will*') that will set us upon the way.

For Bergson, as we know, there are two types of multiplicity: that of material objects juxtaposed in space – quantitative multiplicity, which can give rise to a count and a summation; and that of facts of consciousness interspersed in duration – qualitative multiplicity that must be thought in the mode of a melody. For in a melody, the notes are heard successively, but not separately. On the contrary, they are fused together, so that a same 'do' will not, in truth, have the same qualitative resonance when heard at the end of a melodic sequence as it would when heard at the beginning. Each note is tinged with the unity to which it belongs, so that the same mi that enchanted us in one passage will sound a false note when it appears in another. As a result, similar sounds acquire a differential significance from the sole fact of their being repeated. If I reproduce the same sound, or if I hear the same chimes of the clock, a sentiment is produced in me of a qualitative and original organic totality that will give to the last repeated term – although it is perfectly similar to the one that preceded it – a different and singular subjective effect. To take up the melodic example again: If I repeat the same do five times, the last will truly be different from the first, because it will be pregnant with the repetitive sequence that it brings to a conclusion and which is as if contracted within it. It will comprise within it an original totality that the first do of the same sequence did not at all contain. The remarkable point is that the monotony of the threnody produces a different sensible effect with each new repetition of the same term: each time, the same note becomes different, and differently different from its predecessors. This is why it makes no sense to think of the infinite proliferation of a threnody: for one must hear each new note to perceive its originality, and its own effect. The grasping of a threnody is thus essentially perceptual and finite, not mental and unlimited; it gives meaning to an aesthetic judgment bearing upon the choice of note and the finite number of repetitions proposed in view of the global effect of the sequence.

There is thus, given the sole fact of repetition, a differential effect inherent to empirical sounds – one that even affects perfectly similar sounds. In other words, there is a sensible differential effect that is not identifiable with a dissimilarity. It is the pure passage of time – at least of conscious, sensible time – that produces this difference, which I call repetition or monotony.

But whereas Bergson claims that only duration presents to us such an effect of monotony, and not space, I believe that sensible (visual) space in fact presents the differential effect of repetition just as much as duration. This point is strategically important to establish for the rest of the demonstration (we will see why) and I shall therefore dwell on it for a moment.

Let's take an architectural example: The Bibliotheque François Mitterand, designed by the architect Dominique Perrault. Since this project is artistic as well as functional, it makes sense to pass an aesthetic judgment as to the repetitions – that is to say, the monotonies – premeditated by the architect: the repetition of the four corner towers, but also the streetlights, the safety grilles over the central garden, the caged trees, or the strips of the plaza. One can be enthusiastic, irritated, or depressed by it – but it is always possible and legitimate to make a judgment that bears at once upon the form of the chosen motifs, their dimensions, and the finite number of repetitions of them that the architect decided to employ. A spatial repetition, just like a melodic repetition, is a finite sequence producing 'a sensible non-dissimilar differential effect'. An artistic success or failure is thus always possible, which in turn makes an evaluation possible. According to the same logic, one can appreciate the success or the failure of a work by Daniel Buren such as 'Peinture acrylique blanche sur tissu rayé blanc et rouge [Acrylic painting on white and red striped fabric]' (January 1970), made of twelve identical vertical red bands, 8.7 centimeters wide, alternating with white bands of the same width. This appreciation would have no meaning without the effect of repetition, which assures the totality produced of its proper differential unity.

There is thus a *qualitative* aesthetic effect of spatial repetitions of which contemporary art and architecture have made us aware – more so today, no doubt, than in Bergson's time. This is why it is false to say, as Bergson does, that space must be the foundation of a *quantitative* summation of the same, as opposed to duration, the domain of qualitative repetition. For if the two dimensions of the sensible are equally qualitative, they are *incapable one as much as the other of explaining the pure iteration of the sensible sign*, which escapes the differential effect of repetition (since otherwise, it would not surpass the qualitative perception of a finite series). And because of this alone, neither space nor time can explain the human capacity to produce a quantitative count rather than to feel a qualitative differentiality; for, as we have seen, quantitative summation itself depends upon the iterability of the sign.

Before going on to clarify these theses further, let us make our terminology a little more precise:

- Every reproduction of the same mark will be called a *recurrence*.
- A repetition (or monotony) is a differential and finite recurrence: a frieze (spatial), or threnody (temporal). A repetition is thus spatio-temporal in nature, with space and time understood in conscious, perceptual terms and not as a physical, measurable continuum. And a repetition is a recurrence that produces a sensible difference not due to the fact of the dissimilarity of its motifs, but due to the sole fact of the reproduction of similar elements. Temporal monotony creates a '(differential) threnody effect', spatial monotony a '(differential) frieze effect'.
- On the other hand, I call *iteration* (and no longer 'repetition') a recurrence that is non-differential and therefore unlimited, because it produces a pure identity of marks. This iteration is precisely implemented in the grasping of identical occurrences of the same type. In such a case, I come to see in the mark itself that which does not differ sensibly in any way from one mark to the other. There is no difference in type between one mark and another of a same sign regardless of differences between marks (one 'a' written a little differently from another 'a'), but, above all, regardless of the inevitable differential effects that belong to similar (perfectly similar) marks. In a way that escapes all conventional explanation, I end up being able to recognize as

perfectly identical in type, occurrences of marks that I can *for this reason alone* think as iterable at will. Because, thought as rigorously identical as to their type, lines of such signs escape the differentiating-finitizing effect of repetition, and instead open me up to the universe of writing, beyond that of design or music.

Iteration thus escapes the effect of repetition. Now, since the effect of repetition is none other than the effect of sensible space-time (and not of a non-resemblance), iteration finds in the mark itself a property=x that is not dependent upon time or space, *and that is therefore, in the strict sense, intemporal and non-spatialized*, even though, *paradoxically*, it is indexed to a determinate material thing.

The iterative way of seeing the mark, grasps something eternally identical in a multiplicity of empirical marks, whether similar or not. We see in the marks, taken as occurrences and not as motifs, something that is *eternal without being ideal* (since the marks are devoid of meaning and essence – of *eidos*, of *idea*, or of form).

Now, let us note the following point, which for me is essential: the access to this unprecedented regime of identity is also the condition of access to an equally unprecedented regime of difference: a difference that is neither non-resemblance nor the effect of repetition. In other words, the empty sign allows us a foothold *in another language of difference* – one that is no longer dependent upon sensible space-time – and which thus stands as a candidate for a possible absolutization.

To understand this point, let us set out from a naive enumeration: we begin with signs that are simple bars devoid of any meaning, which we iterate according to an identical kenotype: I, I, etc.

Suppose that we were to allow ourselves, in this elementary symbolic writing, as well as the meaningless base-sign, an operator-sign corresponding to ordinary addition: '+'.

Here, then, we are able to produce a differentiated series whose condition is the iteration of the sign:

It is only because the '+' signs (given an operatory meaning), and 'I' (meaningless) are identically iterable, that I can produce an augmentative succession in which each term *differs from the preceding term in a non-qualitative sense* (non-resemblance or monotony).

But if a differential effect (a repetition-effect) were ever to come about in the iteration, no quantitative progression would be thinkable, because from one term to the other the operation would be modified, and its result with it:

With iteration, I am no longer involved in the *indefinite* (which supposes an indefinite augmentation), but in the *unlimited* (always the same, reproduced identically); and I now have access to a third type of recurrence that is neither repetition nor iteration. This third type of recurrence is differential like repetition, but differential otherwise than the latter, since it is conditioned by iteration, and opens onto the infinite:¹¹ I call it *reiteration*.

Iteration is non-differential and unlimited, repetition is differential and limited, and reiteration is differential and unlimited – that is to say, indefinite. The latter is the foundation of the 'potential infinite', and the source of all naive arithmetic. It is involved in mathematical practice not only as a privileged object, but also as method, in reasoning by recurrence. Reiteration is the entry into the differential territory of iteration; the possibility of thinking differences outside the field of sensible repetition. This point is essential for our undertaking: for sensible plurality (let's say *diversity*) does not escape correlation (I cannot absolutize it, it belongs to the sphere of our relation to the world), whereas mathematical plurality (reiterative plurality, let's call it multiplicity) opens us up to a world of difference that I hope this time to derive from the principle of factiality, by way of the empty sign that makes it thinkable. The first (primo-absolutizing) derivations proposed concerned every being indifferently (every being is contingent and consistent); here, it could be that we accede to a world of deutero-absolute differences: describing some existent characterized mathematically in such and such a fashion, as opposed to some other characterized otherwise (the universe of distinct inorganic existents measured by science).

To pose the question of the conditions of possibility of iteration – in a speculative, not a transcendental sense – is thus to pose the question of the origin of reiteration, and therefore the very idea of a count and of number in their most original sense; but also that of space in its geometrical and no longer sensible sense, or of reasoning by recurrence. In all of these cases I mentally reiterate a sensible mark, or a portion of sensible space, and I make it escape the limits of perception, giving it an intelligibility that only the indefinite captures. Each time there is indefiniteness (of geometrical space, of elements of a proof by recurrence), there is a non-sensible and thus reiterative plurality. Now, it is thereby a matter of the prerequisites for all ulterior mathematical or logical theorization: there can be no arithmetic, geometry or proof via recurrence without the thinkability of reiteration.

We can now understand why Bergson cannot help us to understand the source of iteration and reiteration: because we have extended his idea of the qualitative multiplicity of duration to perceptual space. For Bergson, number comes from space: 'every clear idea of number implies a visual image in space', he writes in the *Essay*. Number, according to Bergson, has its origin in the visual image of juxtaposed units in space – units, consequently, that are separated from each other, and potentially divisible in turn into smaller spatial units. He thus reserves the qualitative difference of repetition for duration, which qualitatively interlaces its successive units; and the non-qualitative reiteration of numbers is blamed by philosophy on the counting of a

¹¹ I distinguish the indefinite from the infinite according to the classical difference between the potential infinite and the actual infinite. The indefinite is the endless augmentation of the finite (1, 2, 3, etc.); it is the indispensable, but not sufficient, preliminary to the thinkability of an actual infinity whose existence is guaranteed by a set theoretical axiom. I cannot explain here how I derive actual infinity factially, on the basis of the derivation of the indefinite.

space deprived of the capacity to link together what it juxtaposes. But since we have, for our part, emphasized the capacity of sensible space to produce a qualitative difference just as time can, we must seek elsewhere than in the latter the source of the iterative power of the sign. Elsewhere – that is to say, *in a derivation of the empty sign operated on the basis of the principle of factiality*.

Final Derivation of the Kenotype

The challenge now is to establish the existence of a factial derivation of the kenotype – and thus of the meaningless sign. Where could it come from, this capacity of thought to iterate a sign independently of the ideality of meaning? Is this a primary fact that cannot be explained, or can we infer this 'iterative' capacity of thought from a deeper principle? The thesis we intend to demonstrate is as follows: *it is because I can intuit in every entity its eternal contingency, that I can intuit a meaningless sign*. How do we obtain this result?

We have already established three characteristics of the meaningless sign: it is (a) *arbitrary* (which means that it escapes the unity of conceptual/ideal meaning); (b) *iterable* identically (which constitutes the unity of the type); (c) *inseparable from its empirical basis* (which permits, importantly, the recognition of series of occurrences distinct as to their type, by way of their non-similarity – α or β). Now, the bringing to light of these three properties aims to prepare the essential requisites for the derivation we seek.

I have supposed as given that the sole eternal property of every thing is its facticity – now identified with a contingency (since correlated from now on with a knowledge), but a speculative, not an empirical, contingency (applicable to every entity – not only things, but also physical laws). It is thus clear that I can intuit any reality whatsoever in two distinct ways: as a contingent thing (the ordinary way of seeing things and events as facts) or as a vehicle of eternal contingency (a speculative way of seeing the necessary contingency inherent to every entity). But at the same time, the contingency of a thing always belongs particularly to this or that thing. Contingency is not beyond the particular things; it constitutes, on the contrary, the perishable character of all reality. In particular, contingency is inseparable from the concrete, empirical determination of a thing – since it is because things are like this or that (red, round, and with an individual redness or roundness) that they could be other, or could not be. It is this determinacy of things – their being only this or that – that was negated by inconsistency, which is indifferently everything and its contrary; which was why we decreed its impossibility.

Given this, I can account in a single movement for the two properties of the sign:

(a) When I see in a thing its contingency, this contingency is iterable identically from mark to mark without any differential effect of repetition. For that which, in any sensible substrate, escapes the differential effect of space-time, is indeed contingency qua eternal. Whence the effect of the unlimited iteration of occurrences. Because the contingency of one mark is eternally the same as the contingency of another mark, I can identify them with no interference from a sensible differential effect that might exist elsewhere (repetition or dissimilarity).

(b) But since contingency is always contingency of such and such an empirical particularity, I am free to *index* contingency – in itself always identical – to this or that series of replicas, and thus to differentiate by convention the contingency of any particular series of marks (for example the series '++++++, etc.'). In other words, I can, by convention, index an equally eternal contingency to one series of marks, or to another, dissimilar to the first, and posited as distinct. Whence the possibility of producing distinct series of meaningless signs.

The empirical particularity serves at once as the support of the identity of occurrences within the same type, and of the difference of the series of replicas between themselves.

(c) There remains the arbitrariness of the sign: in what way can this be derived from contingency?

The relation between contingency and arbitrariness is less immediate than it appears, and by the same token, more interesting. By the notion of arbitrariness, recall that we do not mean the Saussurian immotivation of the signifier in relation to the signified, but the more profound possibility of every sign – and this before even being freighted with any meaning – to be recoded by another sensible mark charged with the same function. In a formal language, the same base-sign can, without any problems other than purely pragmatic ones, be named, renamed, by series of α , of β , of γ , etc.; and this property of meaningless signs has repercussions for meaningful signs, in so far as it belongs essentially to every signifying message to be able to be rewritten or encrypted using a new set of characters.

Now, what is the precise relation between this arbitrariness of the sign and factial contingency? The sign is arbitrary – that is to say, recodable. It is also, like every existent, eternally contingent. What relation is there between these two properties? Firstly, the contingency of the sign does not signify, immediately, its perishability in the physical sense – for in that case, contingency and arbitrariness would no longer coincide. Even if, in a world where precious stones abound, I were to choose for the mark of a sign a supposedly infrangible, physically indestructible diamond, that would not prevent the diamond-sign from being recodable by another mark. The contingency of which we speak is speculative, not physical. It designates the possible being-otherwise of every entity, even entities that cannot be modified by any human means. Physical laws are unmodifiable by humans – but they are nonetheless factial, devoid of metaphysical necessity. To be unmasterable (by man) is not synonymous with being necessary.

But the remarkable point about the sign is that it must be seen as being able to be otherwise, even if its basis is physically indestructible by us. Even a Spinozist could not 'see' a sign as a sign without grasping it as being in principle other — replaceable by another. It is this level of speculative facticity (and not physical destructibility) that allows the thinkability of a sign across its arbitrariness. Here appears the true singularity of the meaningless sign: whereas normally we grasp things through their properties, and secondarily through their contingency (unless we see them from a speculative point of view), we are constrained to grasp these same things through their speculative contingency (their arbitrariness) once they are seen as signs (any sensible reality whatsoever being able to serve as a mark). Now, it is precisely at the moment when we flip from the grasping of contingent things to the grasping of the contingency of things (from empirical things perceived through their determinations to empirical marks perceived through their arbitrariness) that we

immediately iterate them without limit. We then understand the intimate ontological link between these two characteristics of the sign: arbitrary, iterable-contingent and eternally the same, since contingency is eternal.

Whereas the meaningful sign is forgotten in favor of its meaning and its reference, the meaningless sign, given ultimately for itself, as pure sign, makes me accede to its pure gratuitousness, to its pure absence of necessity; to the fact that anything whatsoever could fulfill its task just as well as it does. So that it is indeed the non-foundation of all beings, and not of the sign alone, that discreetly reveals itself in this in-significance. Through the intuition of the meaningless sign, I leave the physical world, where everything seems to have a cause, to penetrate the pure semiotic world – where nothing has a reason to be, where nothing has meaning – and where everything, in consequence, breathes eternity.

Here then is what the factial derivation of the meaningless sign consists in. To recap the three elements of this derivation, I would say the following: The grasping of the sign proceeds *from a switching of our mode of apprehension* – from the ordinary mode of apprehension that grasps certain contingent things, I switch to the semiotic mode of apprehension, that grasps the eternal contingency of this or that thing. This grasping of a facticity other than the empirical (arbitrariness, the unreason of every thing) makes it possible for me to iterate identically marks brought together conventionally as replicas of distinct type-signs.

Conclusion

In producing this derivation, I have not, however, succeeded in reaching the final goal of my demonstration. I have only given a part of it. For what is it that we have established? We have shown that the meaningless sign has an ontological import. But in what sense? In the sense that we have emphasized that the grasping of the meaningless sign has as its *condition* an ontological truth: the necessary contingency of all things. But this derivation of the kenotype is far from sufficient to establish the thesis that we have primordially in view: that of the deutero-absolutizing import of mathematics. For all we have demonstrated, is that to produce an empty sign, one must have access to the eternity of contingency. But we have not at all shown that the empty sign allows, in turn, the description of a world independent of thought. We have only established that one must accede to eternal contingency to produce a mathematics capable of not speaking of anything – since it is founded upon meaningless signs. The new puzzle that appears before us is the following: how can a meaningless sign allow us to describe the world, without becoming once again a meaningful sign, and thereby capable of referring to a world outside of it? How, through what paradox, can we hope that a meaningless sign could not only have a referent, but a (deutero-) absolute referent, more radically separate from us than every correlational apprehension?

Resolving one problem, we find within it yet another, which seems more difficult than that which preceded it. Such is the philosophical journey *par excellence*, where 'thinking we had reached port, we are carried back into the open sea'. ¹²

_

¹² Cf. G. W. Leibniz, 'New System of the Nature of Substances', in R.S. Woolhouse, R. Francks (eds.), 'Leibniz's "New System" and Associated Contemporary Texts' (Oxford: Oxford University Press, 1997), 17.