François Regnault

Dialectic of Epistemologies¹

[**Editorial note: this manuscript file will be replaced by a definitive pdf in early 2013**]

[45] We offer here an exercise of pure dialectics: to enumerate all the possible relations between science and epistemology. How do we find the law of this enumeration? If we vary our two selected terms according to whether or not they exist and according to their number, we clearly obtain several possible cases: if science exists or does not exist, we have what results from this for epistemology, and vice versa; if we take science in the singular or the plural, we have what results from this for epistemology, and vice versa. We can of course also anticipate the aberrant or unproductive cases that may present themselves: What is the epistemology of a non-science? What are the epistemologies of science [in the singular]? Which science corresponds to a non-epistemology? etc. However we want to posit the following restrictive hypothesis: we define epistemology as relative to science or to the sciences. In other words, we impose a univocal trajectory from 'science' to 'epistemology', with the latter receiving the minimal definition of 'discourse on science (or the sciences)'. We can concretely imagine this orientation of the vector in the sense [sens] that one might say that there is a delay of consciousness or awareness about science [conscience sur la science], that epistemology comes too late. The question to be asked is thus: in restricting the number of possible relations in this way (since the choice of one direction [sens] for the trajectory excludes all the possible relations based on the opposite direction) do we not limit the interest of the exercise? Do we not contaminate the sense of the chosen terms? Can the law still be applied, or does the number of exclusions paralyze its effects? To begin with, we respond as follows:

- If we examine all the possible cases of relations resulting from the position according to the existence and number of the two terms, we will leave no remainder as regards the nature of the relation; in the preceding hypothesis, we have prejudged only its direction. It is clear that even if one of the two terms disappears, or even both of them, the relation itself remains formally oriented, even if it is from one nothingness to another nothingness. The direction [sens] of the vector does not prejudice its value or intensity. Why choose this direction then? This is the second response:

¹ TN: First published as François Regnault, 'Dialectique d’épistémologies', CpA 9.4 (summer 1968), 45-73. Translated by Knox Peden and Peter Hallward. We should draw attention to some of our translation choices here. Although 'meaning' would often be the more natural translation for sens, we generally translate it as 'sense', in order to serve as a reminder of the double meaning (frequently evoked here) of the French term, as both meaning or signification and as direction or orientation. For the sake of consistency, we have translated all instances of un or un as 'one' (or occasionally 'oneness'), and all instances of être as 'being'. French allows for the distinction between the infinitive être and the participle étant: the first normally translates as 'being as such' (or as to be), the second as being in the sense of 'a being', or as existing; where necessary we will include étant in brackets. We have translated most of Regnault's references to Plato's Parmenides from the French version he usually refers to (Auguste Diès' edition of Plato, La Parménide [Paris: Les Belles Lettres], 1923), but where he refers directly to F.M. Cornford's translation we have followed suit (Francis MacDonald Cornford, Plato and Parmenides [London: Routledge & Kegan Paul, 1939]). We have also drawn on Mary Louise Gill and Paul Ryan's translation of Plato: Parmenides (Indianapolis: Hackett, 1996). Wherever one or both of these translations is used it will be signalled in the notes.
For reasons primarily of linguistic facility, because epistemology is defined via *par* science and not the inverse. We will shortly provide confirmation of this facility in the matrix we have chosen for the law of enumeration.

Where do we find this matrix? We borrow it, rigorously and textually, from the second part of Plato’s *Parmenides*, the part that includes the celebrated eight (or nine) Hypotheses. Such a choice for the present project cannot be justified without, at some point, forcing the argument [un coup de force]. It is not a question of denying it, but of assigning it its exact place, and consequently its exact remit, which we do not intend to be any weightier than when one chooses, in the application of some equation, a certain value (say 3) for an unknown *x*. On either side of the point where we have forced the argument, we should list each of the justifications we can give. Here they are, in order of increasing importance.

a) We draw first on the authority of Jean Cavaillès, who, in his *On Logic and the Theory of Science*, cites a passage from the second Hypothesis of the *Parmenides* (142d-143a) in order to illustrate the workings of a theory that he describes as paradigmatic of science. It is true that what is at issue is the specific object of a science more than its relations with its theory. However, in the case under consideration, the science guides and envelops the theory.

b) The authority of Parmenides in Plato’s writings; and here Parmenides presents the dialectical exercise as necessary from the point of view of philosophical pedagogy, as formal from the point of method, and as safe from the point of view of its results (135c to 137e): ‘If you want to be thoroughly exercised, you must not merely make the supposition that such and such a thing *is* and then consider the consequences; you must also take the supposition that that same thing is *not*. [...] In a word, whenever you suppose that anything whatsoever exists or does not exist or has any other character, you ought to consider the consequences with reference to itself and to any one of the other things that you may select, or several of them, or all of them together; and again you must study these others with reference both to one another and to any one thing you may select, whether you have assumed the thing to exist or not to exist, if you are really going to make out the truth after a complete course of discipline’ (135e; 136b-c).

These passages designate an empty operation, a matrix of matrices, so to speak. In order for an effective exercise to take place, Parmenides himself needs to posit a hypothesis, or more precisely one or several terms that might enter into one or several axiomatics. ‘Would you like me, since we are committed to playing out this laborious game, to begin with myself and my own original supposition? Shall I take the One itself and consider the consequences of assuming that there is, or is not, a One?’ (137b). What results from this choice are the (eight or) nine final Hypotheses, which vary according to their nature and number. We may be reproached then for producing an indefensible allegory by requiring the position of science and of epistemology to entail as many hypotheses as the One (and moreover the same hypotheses). To be more precise:

1. Let there be an object. What are the results for it and for some other object according to whether this first one exists or not? The minimal matrix contains two values (0 and 1 for example).

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2 The reader can easily skip over the preliminaries that follow and pass directly to the application of the Hypotheses.


5 TN: Ibid., 108.
2. The posited object can be taken in several senses; this is what leads to a much greater number of hypotheses than two, in principle a multiple of two, \(2n\) if \(n\) is the number of different senses of the object.

3. Let us posit the One (Parmenides' choice). If we consider it broadly, in four different senses, we will obtain eight different axiomatics along with their consequences (plus one more, which can be considered as the variant of another, and thus nine in total). In fact, since the being and the non-being that we attribute to the One can themselves be taken in different senses, there is no need to go as far as the four senses of the One to obtain the eight hypotheses. A combination of different senses of the two terms suffices (i.e., an \textit{a priori} deduction).

4. Take the objects 'science' and 'epistemology'. By what right will the matrix of the One function for these new objects?

Several arrangements are conceivable, but not all are legitimate:

\textit{First arrangement}: For semantic reasons we can make the One correspond to science and being to epistemology. A weak pretext for this would be that the One tends to be the object of science, and that being tends to be rather the object of metaphysics, which would at least have the epistemological status of being a discourse on science (in Aristotle, for example). We cannot stop here because the semantic convergence is subordinated to the syntactical or rather axiomatic functioning of each term in each hypothesis. Even if the proximity of place between science and the One were to be conserved, it is the sense or direction [\textit{sens}] of the One that would be lost from one hypothesis to another. The proportion alone would remain constant.

So a much stronger pretext would be that, in the Hypotheses of the \textit{Parmenides}, being is defined as a function of the One, the vector goes from the One to being: the One commands being. In this case, nothing of the sense of the terms is retained, science and epistemology safely translate One and being, the allegory is legitimate though weak. We indeed obtain eight or nine relations between science and epistemology (i.e., perhaps nine possible epistemologies), but we must provide everything ourselves. In order for it to be genuinely a question of \textit{science} and \textit{epistemology} (and not of a spoon and fork), their properties must be introduced from elsewhere, i.e. from a place where they are already defined or presupposed. But then the matrix is not only weak, but also useless; whatever one would hope to gain in its formalism is lost elsewhere in the imported properties. Moreover (and in fact), in the \textit{Parmenides} the One and being do not really operate in a purely formal way, as each Hypothesis introduces a certain number of predicates ('finite, contiguous, temporal...') or relations ('identical, similar...') authorized by the senses given to each of the two terms in the [48] axioms in which they figure together. And these properties and these relations may prove awkward for those properties and relations of science and epistemology that are otherwise widely accepted. For example, if we say of the One that it is 'without figure', or 'contiguous with itself', and if we make the One equivalent to science, we will either be obliged to leave these properties aside and to replace them with the properties of science, put forward for the occasion and drawn from elsewhere, or instead to attribute these same properties of the One to science itself, which would lead to countless difficulties, plays on words, blind windows and absurdities.

The allegory might yet be successful however: we will see how, for instance, the first Hypothesis, which posits the One absolutely and totally refuses the multiple, comes down to positing the One as a pure signifier for which any other can be substituted, as
far as their sense is concerned. Nothing can be said about the One thus posited, and in this case, we are certainly entitled to substitute, for the One, 'science' or indeed any other signifier. But in this way we obtain nothing but a purely negative confirmation of our allegory. Reference to this allegory serves only to generalize it along these lines: even if, pragmatically, the results of all these hypotheses might for whatever reason confirm the allegory as in this example, nevertheless this could only be the result of chance, and the principles stated above would render the allegorical operation illegitimate. So we must renounce it.

Second arrangement: We might take into account the nature of the One and that of being and consider these terms as so general that they can work with any possible subject. To be sure, it wouldn't then matter very much that science and epistemology were the terms substituted for them, since here any object that could be said to be or to be one would do the trick. There is nothing to gain, then, from a semantic convergence. We might stand to gain, instead, from the logical privilege of seeing the One and being attributed to all things, up to and including the multiple itself for the One, and up to and including non-being itself for being – inasmuch as, like Aristotle says, 'it is impossible to think anything [or to think nothing], if one thinks nothing of one' (thus not even the multiple), and inasmuch as, like one sees in *The Sophist*, we must attribute some sort of status to non-being if only to be able to speak of it. In this sense, we only ever *think* something as one, and we only *name* something as a being [*en tant qu’étant*]. In other words, 'Being and the One are what are most universal and, if there is no One in itself nor Being in itself, we do not see how there could be some other being outside of individual things.' As a result, if we were to apply this universality to science and epistemology, it would in no sense be a matter of allegory. In this second arrangement, there would clearly be nothing in principle to justify science's playing the role of the One and epistemology that of being, since the One and being apply equally to both terms. We would only need [49] to take account of the fact that, in the *Parmenides*, since it is the One that has been chosen for the dialectical exercise, being finds itself in the position of receiving its status from the sense given to the One. The relation is thus well and truly oriented; being depends on the One. This would be a convenient reason for choosing the One for science and being for epistemology, thereby conserving the unequal relation evoked at the outset. But can we be content with this formal analogy between two inequalities, and, giving a general sense to the One and to being, can we conserve the respective correspondences? The question should be examined as follows.

Whereas in the first arrangement the semantic correspondence at issue was presented from the point of view of science (the One is its object) and from the point of view of epistemology (being is its horizon), a different correspondence is given here, with more justification, from the point of view of the One and being, and rightly so: it's a matter of interrogating science (or epistemology) as one [*une*] (or as multiple), and as existing [*étant*] (or not existing). We momentarily rid the One and being of their properties as objects of two disciplines when we evoked their apparent functioning in the axiomatic of the Hypotheses; this was done in order to find in this very functioning predicates that didn't fit with this proposal. It is not the same in this second arrangement. To be sure, to begin with, the One and being have no sense other than what they receive

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6 TN: The French reads 'il est impossible de rien penser, si l'on ne pense rien d'un.'

7 Aristotle, *Metaphysics*, book IV, 1001a (citing Jules Tricot's translation of Aristotle, *La Métaphysique* [Paris, Vrin, 1933/1962], II, 156). TN: W.D. Ross' English translation of this passage (in *The Complete Works Of Aristotle: The Revised Oxford Translation*, ed. Jonathan Barnes [Princeton: Princeton University Press, 1984], vol. 2) reads: 'If we do not suppose unity and being to be substances, it follows that none of the other universals is a substance; for these are most universal of all. If there is no unity-itself or being-itself, there will scarcely be in any other case anything apart from what are called the individuals.'
in each hypothesis taken separately; but, taken as terms of general logic, they are also found to retain a general sense that at the very least prevents them from being interchangeable:

1. If sometimes they were to receive their sense only as a function of one another, as signs receive their values in Saussure, they would not, for all that, change places: one is a father only of a son, and a son only of a father, but not as one is a brother of a brother.

2. Were the One to lose all sense, as in the first Hypothesis, and become a pure signifier, the signifier of being would not for all that be substitutable for it. For in its materiality, the signifier of the one cannot see itself substituted for another and thus any term other than the ‘One’ retains a value in that its signifier differs from that of the One.

3. Finally, if it is the case that the One is not, it should be added that it is only as a function of being that it is not, and that being can be defined as not being [étant] the One in the first place, even before being [être] eminently (Hypothesis VI, 162a), of not participating in the One (VII, 163c), of being wholly to the Others (VIII, 165c), or even of not being, just like the One (IX, 166c).

In short, the One and being retain a dissymmetry sufficient to distinguish and place them. But since they also retain, if not in all the Hypotheses, at least in several among them – and that is enough – more sense than their opposition, dissymmetry, and placements alone would let them produce, and since it is precisely [50] on this surfeit of sense that the possibility relies of conferring properties (size, place, movement) and relations (dissimilarity, equality, contiguity) upon them, not always but often – and that is enough –, the result is that these properties and relations will once more repel those that are peculiar to science and epistemology, should we invoke them again. Of course, this invocation doesn't resemble the preceding one. In the first arrangement, the poverty of the matrix compelled us to borrow the properties of science and epistemology from another theoretical field. So these properties were positive, already formed elsewhere. Everything was said, and the matrix came too late. In the second arrangement, in which the matrix (of the One and of being) is richer, we only invoke the potential properties of science and epistemology so as to enrich them in the mould of this matrix. So these properties are no longer real, but only possible; they leave the matter of constituting their positivity to the jurisdiction of the matrix. But the difficulty relative to this second arrangement subsists: there is no reason for science and epistemology to receive any positive properties from properties that would be the exclusive privilege of the One and being; just as it would be normal for the One and being to pass on to the science and epistemology that hold their place only the properties that they receive from their opposition (with the added benefit, moreover, of an identity of asymmetry between the two orders of oriented trajectories), so it is illegitimate for the One and being to impose on our two terms properties that they owe to their concepts alone. And so, as may sometimes happen, if the One has some dalliances [aventures] that it owes not to its encounter with being, but for example with place, time, etc., then its universality, its applicability to every term, would be compromised.

We will lessen the difficulty of this second arrangement if we make an effort to distinguish the One taken as substantive from the one taken as attribute. For all our difficulties have sprung not from the fact that the term 'one' can be applied to any subject [tout sujet], for we cannot then be reproached for applying it to science for example, but from the fact that we have identified science with the One itself and epistemology with being. The key thing is that the One is the subject on which bears the theory of that which is one, of a predicated one. The adventures of the trait of unity are lent by the dialectic of Hypotheses to a unity chosen for this end, the One. It's from the

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8 On this formalism, see Cornford, Plato and Parmenides, 111ff.
excess of the One, taken as subject, over the simple predicate of unity, attributable to any object, that the surfeit of properties comes which renders troublesome the substitution of science's salva veritate for Plato's chosen term. This is why we must slightly correct Cornford's formalism that declares: 'In a modern book it would be natural, in certain contexts, to substitute letters, e.g., "A" for "the One" and "not-A", or "B", or some such symbol for "the Others".  

A remark concerning Plato's dichotomies is necessary here. We [51] know that they are binary (every ternary can be divided into two binaries, one of which commands the other; ternarity is permitted, if need be: cf. Plato's Statesman, 287c\(^{10}\)) and disjunctive, but an equality of the two distinguished essences is also required (this is what is shown by the counter-example of the crane who wrongly classes animals as either animals or cranes, \textit{ibid.} 263c). Now, this equality can in fact be calculated in the case of numerable examples (the animals), but it cannot be done for qualitative essences; we must then vouch for the equality in importance or in value between two essences, which is something that can only be intuited. The same applies here insofar as we are not so much making a theory of what is one [\textit{ce qui est un}] (a predicate defined by a dichotomous opposition) as of the One [\textit{l'Un}] (substance defined by itself). 'We must not,' Plato says with regard to two opposed terms, 'suppose them to exist only in relation to each other, but rather as we have now said, that we should speak of their existing in one way in relation to each other, and in another in relation to what is in due measure' (Statesman, 283e, trans. Rowe).

Third arrangement: The third arrangement follows from the critique of the preceding two. They have allowed us to see the conditions required in order to apply the Platonic model to the question of science and epistemology.

1. The correspondence of these two terms to the One and being respectively must be abandoned.
2. The functions of the One and being must no longer be delegated to science and epistemology, but to the unity and to the being of science or of epistemology. Which of the two?
3. If we retain our initial postulate according to which there is an ordered trajectory that runs from science toward epistemology, and our definition of epistemology as the discourse on science, then it follows that the functions of the One and being must henceforth be delegated to science alone. Two consequences result from this:
   a) The Platonist model, if it is complete, is going to allow us to establish the enumeration of all the possible theories of the unity (or non-unity) of the concept of science. If Plato provides a theory of the One, he provides in the same stroke the theory of the one of science insofar as it is one [\textit{en tant qu'une}]. The same applies, albeit less directly, in the case of being. Thus the surfeit of properties of the One, (of being), its semantic contaminations, and the formalism of its oppositional functioning are no longer a problem for science, since the theory only concerns science in the form of its unity, (of its being), and so these features of the One can be fully preserved. We will need only to concern ourselves with their consequences.
   b) The status of epistemology follows from this: if it is the discourse on science (or on the sciences), it will be explicitly sustained, we will see it at work, according to whether science is said to be one or not, whether it is or is not. The chances are that the existence or inexistence, the unity or multiplicity of science govern in a radical way all

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\(^{9}\) Ibid., 112.

\(^{10}\) TN: VISITOR: Then let's divide them limb by limb, like a sacrificial animal, since we can't do it into two. For we must always cut into the nearest number so far as we can' (Plato, Statesman, 287c, trans. C.J. Rowe, in Plato, \textit{Complete Works}, op. cit.).
epistemological discourse. Broadly speaking, there will then be as many epistemologies [52] as there are different conceptions of this existence and this unity. We will therefore retain the relation postulated at the outset, without making it correspond to that of the One and of being.

Were it to be objected that we have already prejudged the nature of epistemology by defining its discourse only as explicitly involved in the hypotheses of the unity and existence of science, we will respond that, if the model is well made and considers all the possible cases, we will have traversed, with the aid of the combinatory alone, the whole possible space of the problem, and that consequently there is no epistemology outside of these considered cases, since they are all radically pertinent to it.

Were one to object, as at the outset, that we prejudge the nature of epistemology by defining it as the discourse on science, we would say again that, if the model is well made and considers the cases of science's existence as well as its non-existence, of its unity as well as its multiplicity, we will have effectively neutralized the danger of presupposition. If science disappears, as being and as one, there admittedly remains this subordination to that Unding [absurdity] of the discourse that says it, but at the same time the relation is reduced to the minimum, perhaps even to a state of indetermination. Furthermore, inverting the sense or direction of the relation and reversing the whole operation, we could also apply the One and being to the unity and the existence of epistemology alone, but in that case all that is said of the One or being would concern epistemology, and we would find ourselves maintaining a discourse on epistemology, an epistemology of epistemology if you like. We would then wholly miss or lose its relation to science; inversely, in the choice made here, we no doubt miss the relation of science to its object or objects, but we do not miss the science/epistemology relation that we have decided to focus on. So we in no way limit our presuppositions, other than to the relation of a metalanguage to a language, when we propose the following single postulate: any statement on science (or the sciences) belongs to what we will call epistemology, which is thereby defined as the domain of these statements.

There are thus as many epistemologies as there are discourses sustained in this way; we indeed have a dialectic of epistemologies.

Incidentally, we need not fear making unwarranted [intempestives] presuppositions since the combinatory treatment, even if it were to retain the positivity of the relation in each case, would not fail to displace its sense from case to case. The result of this would be that a problematic implicit in the question would become clear through its explicit treatment: we might discover between the lines other true relations among the chosen terms; we could in any event handle the potential equivocities wrapped up in the concepts. Such is in fact the law of the Platonist dialectic, which several authors have drawn attention to, and which Cornford has illustrated with regard to the Parmenides. We can describe it thus: an aporetic dialogue is not aporetic for everyone; one must know how to draw the implicit solution out from under the explicit confusion of difficulties. And so with the Parmenides, and even more so since it culminates in a complete aporia (166c), the attentive reader will have [53] had to locate throughout the work the different possible senses of the One and being, senses whose attribution is only justified by the various axioms that inaugurate each hypothesis (Example: Hypothesis I: if the One is one, ει τι εστιυ – Hypothesis II: if the One is: έν ει έστιυ), and which are then developed in the properties, and then in the relations that are attributed to the terms. We will briefly specify the correlative principles of this reading, i.e. of this specific interpretation of Plato, chosen among several others in order to the respond to the requirements of this dialectic of epistemologies.
1) Whether or not the dialogue succeeds is a function of the method employed by the interlocutors and not a lack of the true \([\text{un défaut du vrai}]\). Through the aporia, we perceive the solution. As it happens, this might be, setting aside the contemplation of essence, a recapitulation of the different meanings \([\text{sens}]\) of the words. Cornford provides an example with regard to being and the One, and shows that Aristotle's \(\text{Metaphysics}\) is situated in this line of thinking and that it completes the project of the separation or defusion \([\text{désintrication}]\) of meanings.

2) The hypotheses of the \(\text{Parmenides}\) are thus not a 'parody' of logic, destined to become muddled in the ironies of Zenonian arguments, nor are they a series of sophisms, nor an esoteric or mystical text, as certain neo-Platonists have supposed. This means that the ludic or esoteric interpretations must be subordinated to a logical or dialectical interpretation. To accuse the series of Hypotheses of being a game is to overlook the laws of this game; the argument that eliminates the sophisms in principle is one Plato suggests himself: 'If One is, we are saying, aren't we, that we must agree on the consequences for it, whatever they happen to be \([\text{ποία ποτε τυγχάνει οὕτως}]\)\?'

3) Whence the result that, if the method is the cause of aporias (though these are pregnant with truth \([\text{grosses de la vérité}]\)), and if the dialectical exercise is not a parodic addition, the [54] section that discusses the Hypotheses (135\(c\) to the end) yields a solution that was implicit in the difficulties discovered by Zeno and Socrates at the outset; in other words, this is one single dialogue, such that the arguments of the Hypotheses are directed against those of Parmenides and Zeno no less than against the theory Socrates expounds at its beginning. But we will leave this point aside in what follows.

These principles authorize our return to Cornford's book for the detail on the Hypotheses. How should we generate this detail?

A. If we consider the One, one can conceive it as being \([\text{étant}]\) or as not being, which makes for two hypotheses.

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11 This point has been established by Victor Goldschmidt, \(\text{Les Dialogues de Platon}\) (Paris: PUF, 1947); see in particular sections 1, 6, and 13-16. See also, for Plato's \(\text{Meno}\), Alexandre Koyré, \(\text{Introduction à la lecture de Platon}\) [1945] (Paris: Gallimard, 1962).

12 Cornford, \(\text{Plato and Parmenides}\), 111.

13 TN: Laplanche and Pontalis present the Freudian concept of \(\text{Triebentmischung}\) in French as \(\text{désintrication or désunion}\) and in English as 'defusion'. They write: 'defusion signifies a process tending to produce a situation in which the two sorts of instincts \([\text{i.e. the life instinct and the death instinct}]\) would operate separately, each pursuing its own aim independent of the other' (Jean-Laplanche and Jean-Bertrand Pontalis, \(\text{The Language of Psychoanalysis}\) [1967], trans. Donald Nicholson-Smith [London: Hogarth Press, 1973], 180).


15 Cornford, \(\text{Plato and Parmenides}\), vi, 113.

16 TN: Based on Gill and Ryan's translation (147), rather than Cornford (136) who omits 'whatever they happen to be.'

17 '[Our] teachings are, therefore, no novelties, no inventions of today, but long since stated, if not stressed; our doctrine here is the explanation of an earlier and can show the antiquity of these opinions on the testimony of Plato himself' (Plotinus, \(\text{Enneads}\) V, 1, §8, trans. Stephen Mackenna and B. S. Page [London: Faber, 1969]).

18 See Cornford, \(\text{Plato and Parmenides}\), 106, 134, etc.
B. If we consider the One as either absolutely one, or as relative to being or as accepting participation in it [participable], this gives us two more hypotheses, which yields four when combined with the preceding two.

C. If we no longer consider this minimal dialectic of the One in itself, but in relation to the Others, this makes four new hypotheses (the One being absolute, or being relative; the absolute One not being, or the relative One not being; and at each point seen from the point of view of the Others), which, when added to the previous results, gives us eight.

Finally, between the second hypothesis and the one that would be the third, there is, according to Cornford, another that sneaks in as a corollary to the second for semantic reasons, and which always lags behind. We will in fact find a more formal status for it. In sum, nine Hypotheses, according to the following schema:

\[(2 \times 2) + (2 \times 2) + 1 = 9\]

Now, this third series of hypotheses (part C) is presented as that of the Others considered with respect to their positive properties on the one hand, and their negative properties on the other. And this is how we would obtain Hypotheses IV and V in the rubric of the One being [étant], and VIII and IX in that of the One not being. In fact, the Others are defined each time only as a function of the nature of the One:

a) In the rubric of the One as being [l'Un étant] (part A), the position of the absolute One and that of the relative One form the first two Hypotheses; once the non-participable absolute One is posited again, we can then only think the negative properties of the Others: 'The One is apart from the Others, and the Others are apart from the One' (159c, Hyp. V). When the relative One is reintroduced, we can think the Others in relation to it. So they acquire positive properties: 'they partake of it in a way' (157c, Hyp. IV).

b) In the rubric of the One as not being (part B), the position of the absolute One and that of the relative One form the Hypotheses VI and VII. When we again posit the non-participable absolute One, we obtain the others without relation: 'there is no one among the Others' (165e, Hyp. IX). In fact, when we reintroduce the relative One, the Others retain some of their positive properties, albeit fleetingly (since the One is not). This is why Plato does not mark their participation in the One, even when the One is understood as participable. However, the Others, instead of being considered as not being (Hyp. IX), are considered as being [étant] in opposition to the One – 'it is necessary first of all [μένω] to assume that there are others' (164b, Hyp. VIII) – even if subsequently we insist more on the One as not being than as having at first conferred upon them their precarious though preliminary existence.

But we can, more simply, present the set of Hypotheses under a dichotomous form, i.e. according to the schema:

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19 This is why Cornford counts eight hypotheses in total, and numbers them accordingly. We will preserve this numbering, to run now from 1 to 9.
20 Cf. the subtitles of Léon Robin's translation (Paris: Gallimard, La Pléiade, 1950). Auguste Diès gives a convincing explanation ('Notice' in his edition of Plato's Parménide [Paris: Les Belles Lettres, 1923], 35). What leads Plato to consider the Others in relation to themselves, in Hypotheses V and IX, is precisely the fact that the One, whether it is or is not, is non-participable [non-participable]. Cf. Diès, op. cit., 36, and Cornford's analysis of each Hypothesis.
21 Whatever the law is, it surely rests on the (axiomatic) equivocity of the concepts of the one and of being [d'être], as was seen by Proclus, who said that there are nine hypotheses because 'One' and 'being' have more than one meaning (see the beginning of book VI of his Commentary). A translator and commentator on the Parménides who was a contemporary of Victor Cousin, J.A. Schwalbé, suggests that we might conceive of the One in three ways (absolute, relative to being, relative to the other), and non-being in two ways (partial, total). 'From there,' he adds, 'nine hypotheses result', and he enumerates them – though we don't perceive a law, but solely the aggregate: \((3 + 2) + (2 + 2) = 9\).
\[2^3 = 8 \text{ or } 2^3(+1) = 9\]

We then have:

- **The One/Others absolute** Hyp. I
- **The One is relative** II
- **absolute** V
- **the Others/the One relative** IV
- **absolute** VII
- **the One/Others relative** VI
- **absolute** IX
- **the Others/the One relative** VIII

[56] Or better yet the following schema, which more clearly shows the relations between the Hypotheses:

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A dichotomy that is combinatory and not classificatory like Plato's, since it can be grasped in arbitrarily choosing the order of the three criteria.

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\(^{22}\) A dichotomy that is combinatory and not classificatory like Plato's, since it can be grasped in arbitrarily choosing the order of the three criteria.
DIAMOND I, V, VII, IX  Place of the absolute Hypotheses
DIAMOND II, IV, VI, VIII  Place of the relative Hypotheses

HYPOTHESIS III (The One is 'is not' [L'Un est n'est pas]), 'corollary' of the second, would be situated at the juncture of the One as being and the One as not being, but just as well at that of the One and the Others, since this is the Hypothesis of becoming. The combination of the two gives it four possible positions on the schema, which could come together in the centre, etc. Plato would only have placed it at the spot where he would have encountered it for the first time. In any event, for structural reasons and in order to pass from any given half of one of the three dichotomies to the other half, it is necessary to posit this multi-functional Hypothesis. There are thus indeed nine of them.

We could group the Hypotheses together in many different ways. We would prefer to retain roughly the Platonist order. However, for reasons that will become clear in what follows, we have decided to have each Hypothesis bearing on the One taken in itself and with regard to the Others follow from the Hypothesis corresponding to the others, taken in themselves and with regard to it. The study of Hyp. I will thus be followed by that of Hyp. V; II will be followed by IV; then III alone, then VI will be followed by VIII; finally VII by IX.

We now have at our disposal a matrix for enumerating the possible relations between epistemology and science, the latter being considered from the points of view of its unity and its existence. This is the only way we have forced the argument.²³

**HYPOTHESIS I (THE ONE. IS THE ONE/OTHERS. THE ABSOLUTE ONE)**

Axioms:²⁴ The One is one and is in no way multiple. It has no parts and is not a whole [tout].

Properties: It has neither beginning, nor end. It is unlimited, without figure, neither in anything other than itself nor in itself,²⁵ neither motionless nor in motion. [57]

Relations: It is neither identical to something other than itself, nor to itself, neither different from itself nor from something other than itself, neither dissimilar nor similar to itself, nor to something other than itself; it is neither equal to itself nor something other than itself, neither older nor younger than itself, nor than something other than itself. It has neither been, nor become, nor is. 'Thus it does not even have enough being to be one.' Concerning it, there is neither 'science, nor sensation, nor opinion.'

Science is absolutely one; its unity is [son unité est]. No multiplicity of sciences makes sense, so there are not sciences in the plural. Science has no parts: scienticity cannot be divided; it is whole in itself. If only mathematics or mathematical logic can satisfy such a requisite, then these are identical to scienticity itself. So it is not only the case that ‘in any special doctrine of nature there can be only as much proper science as there is mathematics therein,’²⁶ but we should even say here that everything that is not included in this scienticity is nothing, is a nothingness from the perspective of the absolute.

No beginning can be attributed to this mathematics (neither from Egyptian practices of measurement, nor from any ideology, nor from any psychological or transcendental deduction). It entertains no relation (resemblance, difference) with

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²³ TN: ‘En cela reside le seul coup de force.’
²⁴ To make things easier, we will summarize the theses of each Hypothesis each time. The translation used is that of Auguste Diès (Platon, *La Parménide* [Paris: Les Belles Lettres], 1923).
²⁵ Concerning space and time, we can just as easily consider 'being in', 'aging', etc., as properties or as relations. The distinctions are not very rigorous here.
anything that is external to it: no experimentation, no application. We cannot even say of this essence that it is perfectly identical to itself, but the introduction of its non-identity to itself withdraws it (or excludes it) from the real and leaves it to thought alone: it is a 'non-real thing in thought.'

We can take Plato's formula in this sense: 'the object under consideration does not even have enough being to be one' (Οὐδὲ ἰσότος ἐστιν ὁστε ἐν εἴσον, 141ε). In this way the plane of language is deduced or designated, in which what remains is the signifier science, which refuses all predicates. It counts then solely as a signifier, and any other signifier would do the trick just as well. This signifier has no proper signifier of its own, then. It is the signifier of a non-signifier.

We understand – and Cornford underscores the point – that this 'one' of the first Hypothesis cannot be assimilated to Parmenidean being, closed, homogeneous, absolutely one and absolutely being [étant], which 'is without lack', since 'not being, it would lack everything' ['n’étant pas, il manquerait de tout']. Parmenidean being lacks nothing, whereas the Platonic One here lacks even this lacking nothing – it lacks being, precisely. The unity of science thus cannot be assimilated to a Parmenidean sphere. It would have instead the status Cavaillès assigned it with respect to Bernard Bolzano's project:

Science is perhaps for the first time [58] no longer considered as a simple intermediary between the human mind [esprit] and being in itself, equally dependent on both and lacking its own reality, but rather as an object sui generis, original in its essence, autonomous in its movement. [...] A theory of science can only be a theory of the unity of science. [...] As a uniquely autonomous progress, a dynamism closed in on itself with neither absolute beginning nor term, science moves outside of time [...]. If total knowledge [savoir] has no sense – with an absolute consciousness there exists a hiatus or in-between as real as with opinion, in such a way that there can be no question of either preparing for it or starting from it – neither does a radical extra-scientific knowledge. [...] Science is a Riemannian volume that can be at once closed and exterior to itself.

The question arises of the possibility of a discourse on this absolute unity of science. The difficulty,' Cavaillès writes, 'of situating the discipline that posits [these characteristics] - of science according to Bolzano – 'appears straight away.' As it's a matter then of considering what is at least named as the other of the one, the fifth Hypothesis, correlative to the first, must be introduced.

HYPOTHESIS V (THE ONE IS. THE OTHERS/THE ONE. THE ABSOLUTE ONE.)

Axioms: The one is apart from the Others. Exclusion of any middle or third solution (there is only the One or the Others).

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27 See Jacques-Alain Miller, 'Suture,' CpA 1.3:46. In principle, the whole of his analysis should be applicable here.
28 TN: This translates Regnault's French text. Cornford has: 'It cannot, then, "be" even to the extent of "being" one' (129). Gill and Ryan have: 'Therefore the one in no way partakes of being' (146).
29 On the issue of introducing such a function of the zero in a Greek text that was unaware of it, see Jean-Claude Milner, 'The Point of the Signifier,' CpA 3.5:82, and the whole analysis that leads up to it.
30 The mode of reality belonging to language differs from that belonging to other substances, and visible objects differ absolutely from words' (Sextus Empiricus, Contre les logiciens, I, 80).
31 Cornford, Plato and Parmenides, 134.
33 Cavaillès, Sur la logique et la théorie de la science, 21-24; we follow several of his analyses here.
34 Cavaillès, Sur la logique, 24.
Properties: They have no common link. The One is not in the Others. The Others are neither one nor a plurality, neither immobile nor in motion.

Relations: They are neither similar nor dissimilar to the One, neither identical, nor different, neither becoming in it, nor smaller, nor larger.

If unity is posited in its absoluteness, and without exterior, the only place for the epistemological discourse that is correlative to it is within it and identified with it, or else it is 'external' to this unity but without any relation being assigned to them, and with no status other than that of language being assigned, in its turn, to epistemology. The first case is the limit of Bolziano epistemology, the second that of logical neo-positivism.35

In the first case, epistemology is the science of science, since it is identical to science; if we raise it to the level of a metalanguage of science, it is the signifier of the signifier that has no signifier. Inversely, science is wholly its epistemology, or 'if there is science, it is in its entirety demonstration, which is to say logical.'36 But then epistemology [59] must account for its pretension to identify itself with scientificity; precisely, the necessity of assigning it the status of a metalanguage renders it relative to that for which its exact function is to demonstrate that it is deprived of relations. It becomes the name for that to which 'no name belongs' (142a). It becomes second: 'Without having resolved these problems, scientific epistemology is unable to constitute itself directly as primary, as was its ambition. Rather it is posterior to the analytic which provides the content of its object, as well as to the ontology which completes its being.'37

The 'exterior' is thus reintroduced in the unity of science as the impossible, i.e. as the unnamed naming the name of science; it only indicates it, but having no other property than the deictic, it loses everything, even its signifier. Hence the absence of properties that Plato assigns it in this new hypothesis. We obtain the 'discourse' without properties on science that closes Wittgenstein's Tractatus Logico-Philosophicus: 'The right method of philosophy would be this. To say nothing except what can be said, i.e. the propositions of natural science [...] and then always, when someone wished to say something metaphysical, to demonstrate to him that he had given no meaning to certain signs in his propositions.'38

'My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them – as steps – to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it).’38

- In Bachelardian terms, it will be said that science is cut off from everything, that there is thus no error that is not a nothingness; or in other terms, there is no ideology that is external to science, nor one that must be referred back to it as the retroactive proof of its falsity.

- In Lacanian terms, it will be said that scientificity can be defined on the basis of the foreclosure from its field of a lack (it constitutes itself in this way); science in this

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35 Let it be made clear at once that the minimal character of the hypotheses considered here ensures that our references to actual epistemological discourses cannot be anything other than formal. We proceed as with regulative ideas. Any real epistemology is a mixture [un mixte]. What's more, not all mixtures can figure here – hence the absence of certain names of the first importance.
36 Cavaillès, Sur la logique, 25.
37 Ibid., 26.
39 What follows involves transformations of Lacanian operations. They only function in their pure state in Hyp. II (with the One operating a foreclosure, and the Others being sutured).
sense lacks a lack.\textsuperscript{40} And yet, this is what is excluded here in its turn; the One of  
scientificity is thus here the lack of this lack of a lack, since outside of science taken in  
the sense of this first Hypothesis there is nothing. Instead of excluding \textit{to} the exterior,  
science excludes the exterior itself. This foreclosure of foreclosure, according to  
operations we can define, comes down to a suture, which consists in the reintroduction  
into science of an exteriority whereby it annuls itself as the subject of its discourse.\textsuperscript{41}  
But this suture within a science (in the Lacanian sense at present, and no longer that of  
the Hypothesis) of what is excluded from it; its reintroduced exterior, although it is the  
suture of a foreclosure, is [60] not the suture of a subject: here it is precisely foreclosure  
that plays the role of the subject. In order to understand such an ‘anomaly’ (the  
suture is a suture), we must distinguish between the structure of this One of the  
first Hypothesis, which is a structure of subject, and that which we making it bear here,  
the name of a supposed foreclosure.

Here science excludes itself from the discourse about it as the subject of its own  
discourse, but if we want to persist in giving it the name science, and the name of  
epistemology to this discourse, then it is this discourse that plays the role of science; it is,  
like science, desutured, but desutured here precisely from science. It is at once  
science, the supreme truth (Bolzano), and it is also, since we do not allow it to retain  
either the name or the properties of science, wholly destitute, like the Others of the One  
(neither one, nor multiple, nor similar, nor dissimilar, neither in motion, nor at rest,  
having with the One no common link). Such is the discourse of the \textit{Tractatus}, which  
absolutely guarantees the truth of which it speaks – ‘the truth of the thoughts  
communicated here seems to me unassailable and definitive’\textsuperscript{42} – but at the same time  
this discourse is totally deprived of sense, it is ‘nonsensical’.

If, structurally, the One and the Others do not have the same function, they have  
the same properties, and their difference is absolute and non-attributable [inassignable].

We should add that these Hypotheses I and V, in which the absolute idealism of  
science is confined to an ineffable negative theology of science,\textsuperscript{43} will serve as a limit to  
the correlative Hypotheses IX and VII.

The passage to a second hypothesis is justified by the necessity of conferring  
properties on the One, but we must not claim to deduce it from the first.\textsuperscript{44} All the  
hypotheses are thinkable, or if they are not, they can be stated (as well-formed  
expressions): the contradictions they entail, should they arise, are irrelevant. We can  
only say that some of them are aporetic, and this is what renders the transition from one  
to another impossible. It is thus by consideration of the matrix alone that we now  
attribute being to the One in a positive way.

**HYPOTHESIS II (THE ONE IS, THE ONE/THE OTHERS, THE RELATIVE  
ONE.)**

\textit{Axioms: It is, but does not merge with being, nor does being with it: ‘their  
subject alone is identical, namely “the One that is”’ (142d). Each part possesses at once  
being and oneness, and so on to infinity. There will be an infinite multiplicity of beings  
[êtres].}

\textsuperscript{40} For an explanation of these concepts, see Jacques Lacan’s \textit{Ecrits} (Paris: Seuil, 1966), and Jacques-Alain  
Miller’s ‘Action of the Structure’ (CpA 9.6) in the present volume of the \textit{Cahiers}.

\textsuperscript{41} This is what justifies, though in terms of lack, the reintroduction of an ‘exterior’ to the One, developed  
above in terms of language.

\textsuperscript{42} Wittgenstein, \textit{Tractatus}, preface.

\textsuperscript{43} Many commentators, both neo-Platonist and not, have rightly traced the origins of negative theology to  
this first hypothesis.

Properties: Infinite multiplicity of the One in itself. It is limited, has beginning and end, and shape; it is in itself and in something other than itself, immobile and in motion.

Relations: It is identical to itself and different from itself, identical to the Others and different from the Others, similar and dissimilar to itself and the Others, contiguous and non-contiguous to itself and the Others, equal and unequal to itself and the Others (smaller and larger too). It participates in Time (is older and younger, etc.). It becomes, it has been and it is. There can thus be ‘science, and opinion, and sensation’ of it.

The unity of science is, but not in the sense that it is one. It is ‘the One that is’, nevertheless, that is the sole subject both of the One and of being; it is the unity of science – let’s call it scientificity here – that is sometimes one and sometimes something other. We could call it existent, but it would be better not to restrain the meaning of the word being to existence alone. This is why we will say: science is science and much more, which means that one can attribute limits to it, a beginning, an end, a configuration, a space and a history. For example, we can say, referring to time: Greek science, classic science, but this multiplicity will not be a discontinuous dispersal. The category of science will be rightfully preserved in all cases.

We might also refer to space: mathematics, physics, etc. But here too we are not condemned to a pure multiplicity, otherwise there would not only be no reason to call these particular beings science, but equally, we would be authorized to call anything science. This Hypothesis leads then to a regionalizing epistemology, like Bachelard’s, but it does not authorize dispersion. It guarantees the properties common to each particular science, and precisely those properties we were entitled to confer right away upon scientificity in general. All sciences have in common their scientificity, and this cannot amount to nothing: ‘the one that is, must it not itself, since it is one being, be a whole, and the parts of this whole be oneness and being?’ [142d]. Consequently, if it is said that the One has a beginning and a history, the same will have to be said of all the ones that follow from it. It is a question here of a conceptual deduction rather than a historical development. As such, it will not be said that mathematics has given rise to physics, and then to chemistry, etc. It will be said rather, for example, to use Bachelard’s concepts, that scientificity (what he calls the esprit scientifique) institutes itself via an epistemological rupture with the ‘web of errors’ that precedes it, and that one must mark this rupture in each particular science, and each particular science will possess scientificity for itself (it is indeed ones that the One engenders). This is how it works in Auguste Comte’s classification of the sciences, which are sciences (they all have criteria of positivity), yet which have a well-ordered filiation among them. [62]

If we add to this engendering of the one part of the One the parallel engendering of its other part, then a field of science opens that does not coincide with scientificity itself, and which renders possible the movement of this scientificity.

The One that is

one

being

one

being

45 Cornford prefers to avoid the meaning of existence in this hypothesis, and rightly insists: "Being" is to be taken in the widest sense [...] as belonging to anything about which any true statement can be made' (Plato and Parmenides, 136).

We still have to distinguish the One with respect to being from the One with respect to the Others: 'Suppose we take a selection of terms, say, being and the different, or being and the One, or the One and the different' (143b-c). This leads us to three different dialectics:

(a) that of the One and being: the unity of science or of each science can encroach upon being and produce a rejection of being [un rejeté d’être], ‘being’ being the name of the formally rejected term. Along these lines, Bachelard says: ‘science creates philosophy’, we could call this rejection the spontaneous philosophy of the scientists [savants] to use Louis Althusser’s expression. For example, Newton gives space and time the purely mathematical character of independent variables of movement of the body of reference (in scientificity), but he adds to them the metaphysical character of absoluteness (in being).

Inversely, it will be said that there is no being or metaphysical statement that does not owe something to a potential scientificity, 'for the One is always pregnant with being [gros de l’être], and being pregnant with the One' (142e). This is what is expressed for example in the claim that metaphysics only begins with Greek science. Cavaillès describes this process in a more pertinent and intrinsic way when he uses this Hypothesis of the Parmenides to think what he calls a paradigmatic conception of thought. 'Synthesis is coextensive to the engendering [l’engendrement] of the synthesized [...] There is no sense without an act, and no new act without the sense that engenders it.' But the Bachelardian relation between a science and the quantity of metaphysics it contains (and jettisons) is at bottom the same referred back to its core for if pure scientificity defines itself solely by the foreclosure of being, as scientificity in its becoming, by contrast, it unceasingly rejects being. The history of the sciences is the sequence of these rejections. There is only the first or primary One [l’Un premier] that functions as the ideal of science; all the rest is weighed down with being.

(b) that of the One and the Others: this necessitates, as with the first hypothesis, that we add to this second one its correlative (The Others/the One), Hypothesis IV.

HYPOTHESIS IV (THE ONE IS. THE OTHERS/THE ONE. THE RELATIVE ONE)

Axioms: The One is. The others are part of it; they have community with it and with themselves.

Properties: They are a whole, and are multiple, limited and unlimited.

Relations: They are similar and dissimilar to themselves and to each other.

(b) (continued): Because it does not coincide with being, the One engenders an alterity. Being is the name of this alterity as it is referred back to this One (it is pregnant with the One). But we can also consider this alterity as alterity (of the One) rather than as alterity of the One. So the other of scientificity taken as a whole is the prescientific domain,
which receives its status and its space from the cut that the One carries out with it; this is how Galilean science reveals the medieval physics of the *impetus* to be prescientific. Hence, it is the whole oneness of the One that determines and circumscribes its specific alterity: to each science there corresponds the ideology with which it has ruptured. The Others, or the ideologies (here deduced) thus do indeed have 'community with the One' (158 d) (alchemy is the other of chemistry, not physics) 'and with themselves', and the ones with the others (all ideologies have common characteristics, if only as a result of their retrospective re-absorptions in configurations that are always larger: alchemy rejoins the pseudo-physics of the *impetus*). We are thus entitled to speak of a science that is contiguous and non-contiguous (148d-149d) to its other to describe the relation of cut [rapport de coupure] that it maintains with its ideology.

If then we take all the relations that Plato, in either Hypothesis II or IV, posits between the One and its others, we can, by adding dialectic (a) and dialectic (b), apply them just as well to a science in becoming and to its ideal scientificity as to this same science and its ideology of rupture:

- The One is self-identical = all science is its scientificity;
- The One is different from itself = the state of knowledge [*savoir*] does not coincide with the ideal of science;
- The One is identical to the Others = there is only ideology if there is science. They are identical insofar as we name them together and separate them from the rest;
- The One is different from the Others = a science is not its ideology, etc.

Moreover, the multiplication of dialectic a by dialectic b induces a third dialectic: [64]

(c) that of being and of the Others; being, or here, the rejected, the foreclosed of science, 53 is not identical to what is cut from science. This can account for the fact that Galileo for example was able to proffer a metaphysics (the Universe is written in a mathematical Language) that was not incompatible with his physics, 54 whereas he could not endorse the pseudo-physics of his predecessors – which doesn't prevent the metaphysics compatible with the state of a science from becoming incompatible with a subsequent state of this same science, as when Bachelard explains that Cartesian epistemology doesn't work with modern physics. In that case, metaphysics falls back into the field of ideologies, it becomes a movement of being toward the others of the One, of the foreclosed toward the simply renounced. A science simultaneously breaks with its prehistory and excludes itself from the metaphysics that accompanies it.

- In Comtean terms, the positive state breaks with the theological state and distinguishes itself from the metaphysical state. This latter vacillates between the other two. It can only be the effect of the positive on the theological.
- In Lacanian terms, the foreclosure of foreclosed being determines the latter to relate incessantly to the space that excludes it; it is by this impossible suture to a foreclosure that it manages to exclude its real suture to another space, that of the Others of Science, which is sutured by nature, the space of the subject. Being is still pregnant with the One, and claims like the One to lack lack, but it is also itself thrown back as if

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53 We will see in Judith Miller's article [in this same issue of the Cahiers] how, in Galilean physics, relation precisely excludes being (CpA 9.9). In our second Hypothesis, the One signifies science and being thus signifies being, but the coincidence is fortuitous in principle, and we cannot be accused of allegory: we arrive at this coincidence, we do not posit it.

54 On this subject, see the analyses of Alexandre Koyré in his *Études Galiléennes* (1939), *Études d'histoire de la pensée scientifique* (1966), etc.
its oneness is annulled\(^{55}\), it comes to lack *tout court*, which no longer serves then to distinguish it from the subject.

Thus Newton's absolute space, however far from any subject, and referred to the big Other of the *sensorium Dei* alone, has, since relativity, fallen into the space of the small others, of *impetus*, of nature's abhorrence of a vacuum, and of phlogiston theory. It will be said that this space, foreclosed from science ('écarté par le bras du secret qu'il détient') and at the same time emerging from the depths of an otherwise suturing space ('naufrage cela direct de l'homme'),\(^{56}\) is that of overdetermination.\(^{57}\)

That there is a tenable discourse on these three dialectics and that it has its place here is further attested to by Plato: 'So there can be science, opinion, and sensation of it [of the One]; since we in fact are now exercising all these activities with respect to it' (155d).\(^{58}\) Epistemology is its name, but this discourse comes to be held under the authority of different proper names assigned to this Hypothesis. [65]

HYPOTHESIS III (THE ONE IS AND IS NOT, ABSOLUTE AND RELATIVE, ETC.).

Axioms: The One is one and multiple. It is and is not.
Properties: cannot be assigned.
Relations: It becomes similar and dissimilar, larger and smaller; in motion, it immobilizes itself, immobilized, it moves, etc.

In the preceding Hypothesis, there was knowledge of the One because at each step of its multiplication to infinity, we could actually distinguish its part of oneness [d’un] and its part of being, the stable part of its scientificity and the vacillating part of what it was excluding from itself. In introducing several other determinations than those that the sole category of unity allows, we could describe the actual or effective configurations of science, or of each science, and find for them stable states. But if we reduce each configuration to the formal punctuality of the One alone, the division between the oneness of the One and its being will multiply to infinity in an instant, and we are no longer able to assign any possible proposition to the One nor to being. In that case the One is one and multiple, it is and is not, the state of science and the sciences becomes liquid. Science is reduced to its denomination alone; without properties, it can be attributed to any object whatsoever. This comes to pass when one proclaims to be science all that emerges at the vanishing limit between the space of scientificity and the space of ideology. In the space – this means that we will call science any branch of a science, and any branch of a branch, to infinity. In the terms of temporal development, a science will be born each day.\(^{59}\) Or again, and without going to this extreme, we can detect in what could be called a minimal positivism (and echoes of which we find in Claude Bernard) the idea that science is the vanishing present instant that renders null all that preceded it and ratifies all that follows: science is the future of science. Its development is reduced to the pure development of a cursor on the line of time: 'Medicine is directed toward its definitive scientific path. By the natural march of its evolution alone, it thus abandons little by little the region of systems to assume more

\(^{55}\) TN: 'il est aussi renvoyé lui-même comme annulé de son un'.
\(^{56}\) TN: These references are to Stéphane Mallarmé's poem *Un coup de dés*.
\(^{57}\) Cf. Jacques-Alain Miller, 'Action of the Structure' (CpA 9.6), in which epistemology is defined as a discourse of overdetermination.
\(^{59}\) This is encountered in numerous cases of the human sciences. All epistemological interrogation is thereby reduced to a pure question of designation.
and more the analytic form, and return gradually to the method of investigation common to the experimental sciences.

This third Hypothesis can be applied in turn to the fourth, already envisaged. We consider then the Others than the One, but these have no more stability than it. Ideologies no longer have any properties in this case, and they cannot be distinguished from sciences; henceforth their characteristics can be attributed to the sciences themselves in the ind distinguishment of properties. Scepticism arises here; this is the moment of the evil genius, when [66] Descartes accuses all the sciences themselves of nullity, including mathematical certainty itself, in the name of a more powerful hypothesis.

It has been noted that this is the same third Hypothesis that, when applied to the second, established the reign of the 'everything is science' or 'everything can pass for science', and when applied to the fourth, the reduction of even the best sciences to nothing, by a decision of the subject. An absolute suture excludes all foreclosures, but all sutures as well.

We will not add very much to the almost empty content of this Hypothesis, except to say that it is that of all transition from one Hypothesis to another, since it consists in making the status of the One vanish: 'it cannot even change without making a change' (156c). The result is that one can in principle find this same Hypothesis III between Hypotheses II and IV, IV and VIII, VI and VIII, II and VI, between Hypotheses I and V, V and IX, IX and VII, VII and III.

Reduced to pure vacillation, it serves as a common place for all the Hypotheses (the One at once is and is not, is one [un] and multiple, etc.); it is the multiple root of all the equations, or the mediation of all proceedings [instances]. Their dialectic is thus of a Hegelian order.

From here we are going to enter into the field of the One as not being [l'Un n'étant pas]. If we translate this as meaning that the unity of science is not, we can understand this as implying either that science as such is in its essence multiple, that there are only sciences, or that there is no science at all. The first case corresponds in general with Hypotheses VI and VIII, of relative negation, and the second to Hypotheses VII and IX, of absolute negation. With the former, it is the unity that is lost, and scientificity fractures into particular objects. With the latter, it is scientificity itself that comes to be lacking, which implies, at the limit, a radically pluralist epistemology in the former case, and a thoroughly sceptical one in the latter.

HYPOTHESIS VI (THE ONE IS NOT. THE ONE/OTHERS. THE RELATIVE ONE)

Axioms: It's the One that is not. It is knowable, different from the Others (it's to the extent that it is [en tant qu'il est] that non-being is attributed to it: it participates in being 'in some way' ('Πη', 161e).

Properties: It has a large number of them, for it participates in all kinds of things, it is in motion and at rest.

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Claude Bernard, *Introduction à l'étude de la medicine expérimentale* [1865], introduction; emphasis added.
61 TN: Cornford has: 'On the other hand it does not change without making a transition' (200).
62 We can thus confer upon the third the status of a real Hypothesis (the traditional solution), or that of a corollary to the second. This is Cornford's solution, which however restrains its function, since in our view it can circulate. Furthermore, he refuses to accord to it the role of synthesis in the Hegelian sense. But then he refuses a priori any proximity to Hegel. It is true that he grants Plato everything he denies Hegel (195, 202): he is opposed on this point by the authority of Hegel himself, who often specified what he owed (or didn't) to the *Parmenides*. For example: Hegel, *Science of Logic*, trans. George di Giovanni (Cambridge: Cambridge University Press, 2010; the pagination here refers to the German *Gesammelte Werke*), introduction, 21:40; chapter 1, 21:70, 76, etc.
Relations: *It is different from the Others, dissimilar from the Others, resembles itself, unequal to the Others, but equal to itself (large and small). It is an object of science.* [67]

This Hypothesis, which allows the One to participate in certain properties even while refusing it being, is symmetrical with Hypothesis II. The One is evoked only to be dismissed as an existent [existant] straight away. There is not really a unity of science, so we must now only speak of sciences. By what right? At least their signifier gathers their plurality. The unity of sciences is not, but it has a being of language or of illusion. The non-being of unity resembles that of the *Sophist*, introduced precisely in order to define the status of the image.

Unity is thus only posited as a name. This name can serve as a commonplace for many objects deprived of properties, but it is only a name indefinitely repeated with regard to each among them. We can thus speak of it, 'there is science of it' (160d), but this is not to say anything else about it, except that it circulates from object to object, assuring only their liaison without predicates, and in consequence their pure difference: 'so, in addition to science, difference also applies to it' (160d). Equal to itself alone, it is the difference of the Others. It plays exactly the same role as Mind [Esprit] in epistemologies such as those proposed by Brunschvicg, Lalande, etc. For it is not the unity of science that is one, it is the unity of a something about which one can say nothing, but of which the sciences give a different version at every moment. The unity of science is outside of science, if we understand by science the rigid configurations wherein the perpetual spontaneity of reason is paralyzed from moment to moment. 'Reacting against the logicism coming from Frege and Russell, which it regarded as a renewal of the Aristotelian tradition, [Brunschvicg's epistemology] sets thought as a creation escaping all norms against its linguistic expression, which, as a social phenomenon, immediately falls prey to both the illusions of the city and the laws of nature.' [63] Similarly, Lalande distinguishes reasoning reason [la raison raisonnante], a pure spontaneity always at work in science yet deprived of all properties (the One not being [étant], but being in a certain way) from reasoned reason [la raison raisonnée], the system of visible consequences of the invisible activity of Mind.

This epistemology is in one sense the culmination of Kantianism: the understanding, or the capacity for rules, does indeed have formal though positive properties in Kant, and science is subordinated to this capacity, even if the question of its actual regularity or severity [sévérité] is not in doubt. [64] However: 'There is no science qua autonomous reality, and describable as such, but rather a rational unification of diversity that is already organized by the understanding according to a set pattern, or gleaned from a body of evidence with neither plan nor discovery.' [65] This position straddling the second Hypothesis (the unity is [68] real) and the sixth (there is no unity) thus accentuates unity, even though this unity is not precisely that of science. But if we withdraw unity's properties from it – and this is the whole meaning of Brunschvicg's critique of Kantian categories – then we open the sciences up to an actual history, but we have not for all that abandoned their subordination to the unity of a fixed term, at once being and not being, even if we should be unable to say anything about it.

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64 However, the fact of science is not sufficient for Kant: 'Such would be the case if we were to suppose as given facts the existence of mathematics and Physics as sciences, in order to then ask ourselves about their conditions of possibility. Such a method, which has been called regressive, is nothing other than the apagogic method, which Kant condemns, at least insofar as Philosophy must supply rigorous proofs for its affirmations, rather than settle for opinions' (Jules Vuillemin, *La Philosophie de l algèbre* [Paris: PUF, 1962], 54).
Intuitionist constructivism is not unrelated to such a representation. It takes a further step in that it no longer affirms the subordination of constructed truths to eternal truths, but only presupposes it: 'In fact all mathematicians and even intuitionists are convinced that in some sense mathematics bear upon eternal truths, but when trying to define precisely this sense, one gets entangled in a maze of metaphysical difficulties. The only way to avoid them is to banish them from mathematics.'

Being is thus no longer in the One, it is wholly in the construction: "to exist" must be synonymous with "to be constructed".

**HYPOTHESIS VIII (THE ONE NOT BEING. THE OTHERS/THE ONE. THE RELATIVE ONE)**

Axioms: The One is not. The Others are different from it.

Properties: The Others are an infinite plurality and can receive only apparent properties which immediately vanish.

If in the end we exclude even the merest reference to the One, we obtain an infinite multiplicity of qualities that cannot be attributed and an incoherent pluralism of the sciences. 'So anything there is, upon which you may fix your thought, must be frittered away in subdivision; anything we may take will always be a mass without a One' (165b).

We rejoin Hypothesis III in this absolute dispersal. There is a small difference, however; we considered the third Hypothesis only in the place that it then occupied: culmination of the second Hypothesis, it had been obtained by the proliferation of the division of the One. The One was maintained as the ideal of science, and we distanced ourselves from it as we descended further in time, or lower in the space of division; in this way, the human sciences and their multiple branches were always connected in principle to an ideal of scientificity. But in the present case, we have not obtained the multiple by proliferation of the One. Instead, with the unity of science abolished (the One is not), and its participation in being reduced to nothing (the Mind as empty plasticity), we have turned to the so-called positive properties of particular objects; we are no longer attached to any ideal, the ideal is in the thing, and it's now only a matter of doing [faire]. Bricolage becomes the truth of science. [69] All combinations are possible and bear the name science. 'As with scene-paintings, to the distant spectator all will appear as one thing, and seem to have the same character and to be alike; but if you approach nearer, they seem many and different, and this simulacrum of difference will make them seem different in character and unlike one another' (165c).

Brunschvicgian epistemology continues to connect the historical realizations of science to Mind or Man and thus continues to rely on a supporting anthropology as the ideal of its epistemology (homo faber, artifex, sapiens). With this term of reference annulled, combinatory or structuralist epistemology has no other space than that in which this pure multiplicity repeats; it identifies itself with its object. As identical to it as the epistemology of Hypothesis I (that of neo-positivism) was to its object, it differs from it in that there epistemology was the science of science. At present, in the absence of science, it is its

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67 Ibid., 2.
70 Léon Brunschvicg develops this anthropology in his work *De la connaissance de soi* (1931).
object that identifies itself with its activity, that becomes pure activity. But this is no longer the activity of Mind or of Man, this is the activity of the structure. \footnote{71}

In Lacanian terms, since in this hypothesis science is excluded, though not its relation to that which it itself ordinarily excludes, it is here found sutured to the multiple discourse. Suture of a foreclosure, in other words quite simply a suture: the One is then the sutured subject and bears the name of Mind (Brunschvicg); the multiple discourse, deprived of the One (for if one thing is sutured to another, this other lacks from the former), has nearly carried out a foreclosure. Foreclosure, since it is only just \textit{à peine} a subject that it has excluded. Nearly, because this discourse, losing, in its perpetual difference with itself (‘It is therefore mutually that they are others; this is the sole resource that remains for them, at the risk of only being the others \[of nothing\] \[164c\]), \footnote{72} the unity of this foreclosure, comes to re-establish a suture \textit{in each} of its elements. We were at least hoping for psychosis; all we got was the dream – \textit{όυαρ ἐν ὑπωό}, says Plato (164\textit{d}).

HYPOTHESIS VII (THE ONE IS NOT. THE ONE/THE OTHERS. THE ABSOLUTE ONE)

Axioms: \textit{The One is not. It does not participate in being in any way.}
Properties, relations: \textit{No property and no relation can be assigned to it. It is unknowable.}

We can at present thoroughly deny the unity of science, along with its participation in anything else whatsoever. We can even say that if the unity of science has no sense, then it is multiplicity that has a sense (return to Hypothesis VI): in fact this multiplicity in no way participates with this \footnote{70} One. It does not even have a name, or at least, in its lack without remainder, even its name is carried away. Nothing outside of it can bear the name of science. There is quite simply no longer any science at all, and no epistemology either: \footnote{73} ‘science and opinion and sensation, definition or name, all that or anything else that might be, can it be referred to what is not? In no way’ (164\textit{a-b}). As Plato’s commentators have explained, we reconnect with the first Hypothesis; but whereas before we had at our disposal, in the One absolutely One, a signifier of the unnameable, here we instead \textit{indicate} the unnameable of the signifier. The neo-Platonists conceived the first as a transcendent being (here the ideal of science) and the second as the abyss of the nothing (the lack of science), foreclosure of all foreclosure. Does a place remain for anything else? For that, we need to introduce the ninth and last Hypothesis.

HYPOTHESIS IX (THE ONE IS NOT. THE OTHERS/THE ONE. THE ABSOLUTE ONE)

Axioms: \textit{The One is not. The Others are, but they are neither one, nor several, having no relation with the one. No property and no relation can be assigned to the Others. They are unknowable.}

\footnote{71} We refer on this point to the analysis of Pierre Macherey, \textit{Pour une théorie de la production littéraire} (Paris: Maspéro, 1966), 165-173.
\footnote{72} TN: Cornford has: ‘They must, then, be other than each other; that is the only possibility left, if they are not to be other than nothing’ (236).
\footnote{73} See Etienne Gilson, \textit{Les Tribulations de Sophie} (Paris: Vrin, 1967): one philosophy chases after another and every science does the same. Theology alone remains one and the same (which refers us back to the first Hypothesis and forecloses all the abominated others).
We must now posit that if neither science nor its unity are absolutely, the inverse symmetry with respect to the first Hypothesis here implies a status for the Others than the One. They are in some way. But in their turn, like the One of Hypothesis I, have no other status than that of a 'non-real thing in thought'. Things, rather, and things in an infinite number. We can indeed then confer upon them the name of epistemology, but we only obtain the shattered epistemology of a non-science. Even this name is illegitimate; rather it is the reign of ideologies without number and without predicates. The circulation of signifiers is indefinite; they are signifiers without signification: 'if the one is not, nothing is' (166c). Their circulation, moreover, strips them of that 'anteriority to the subject' for whom there would be signification. Every signifier is thus sutured to every other. All that remains are sutures, everything comes to be lacking, even if it be from nothing.

This Hypothesis is thus symmetrical with the first, but in an inverted form; it was the One that played the role in the first that the Others play at present (a structure of the subject), and the Others of the first played the role of the One at present (they were foreclosed by the One, whereas now it is by them). But as the Others were not, and this One is not, we have in both cases simply foreclosed not to the exterior, but the exterior itself, and we thereby obtain a foreclosure of foreclosure, namely the suture that we've just [71] indicated – suture of foreclosure there (Hypothesis I), proliferation of sutures here (Hypothesis IX).

If, deploying the third Hypothesis, we reduce to these nothings that they have become these Others than the One-nothing, we then obtain the Hypothesis symmetrical to Hypothesis I, that of the One reduced to nothing and inexistent others. In this way the structures of the two hypotheses (I and IX) are exactly identical, as are, at the beginning of Hegel's Logic, those of being and of nothingness (here the One as being absolutely, and the One as absolutely not being): being

is pure indeterminateness and emptiness. – There is nothing to be intuited in it, if one can speak here of intuiting; or, it is only this pure empty intuiting itself. Just as little is anything to be thought in it, or, it is equally only this empty thinking. Being, the indeterminate immediate is in fact nothing, and neither more nor less than nothing. [...] Pure being and pure nothing are therefore the same. The truth is neither being nor nothing, but rather that being has passed over into nothing and nothing into being. 75

No more hypotheses are possible, and the circle is thus complete. The exercise is finished.

It is not a question of concluding, since the matrix is self-sufficient; we will add nothing, then, except for some further turns of the screw.

1. The matrix can now be put to other uses. There's no need to believe that it was made for science. The most we could say, on condition of adopting the second Hypothesis (which made for each being its correlative one in the division of the One), is that it is Greek science that induced this metaphysics of the one and the multiple in Plato (in its logical rigor, and not in its mystical acceptation, for mythologies about it were not lacking before the Greeks), and so it is not by chance that it functions as well as it possibly can when we reintroduce a dialectic of science into the matrix. Verum index sui.

2. On the other hand, we acknowledge that we have only considered science (and epistemology as the discourse on it) in terms of its kinds of unity, and of its existence, but not in terms of its nature, nor of its content, nor its functioning, nor its

74 Miller, 'Suture', CpA 1.3:51.
real history, etc. It's a matter of science reduced to the problem of its unity, but at least this matters, and we are prepared to affirm its fundamental character.

3. We said at the outset that there was an excess of the One-substance over the one-predicate, and that this is what partly prevented us from assimilating the One to science for example. Consequently such a substitution has not been carried out; it has only resulted occasionally from the nature of certain Hypotheses.

The danger resided in the concept of unity, which, as a super-eminent essence, risked receiving properties due more to Platonist metaphysics' [72] valorisation of essences than to their reduction to the simplest logical expression. We would thus have harvested, along with the wheat of the One, the One as pure formal term, the chaff of the One as value. This danger must be dissipated.

To be sure, each Hypothesis secreted several metaphysical excesses over the amount of logic that it contained, relative to those axioms that we used to frame the beginning of its formulation. But if we take account of the integral and circular character of the matrix, we can consider each excess as due only to the fact that in each Hypothesis, the One can retain or foretell the properties that it receives in another. Step by step, then, the axiomatic matrix as a whole will have reabsorbed the excesses of each particular axiomatic. At bottom, in a given Hypothesis, the One-substance only exceeds the one-predicate by the possible number of predicates it is capable of receiving in all the others. Oddly enough, the dialectical exercise in the Parmenides might reduce [réduirait] the essentialist metaphysics by making it circulate in the matrix (whereas in the dialogues without matrix, the ethical or political dialogues, Essence retains on the contrary the splendours and privileges of its solitary valorisation).

The excess of sense is thereby referred to its true cause, the equivocity of the One due to its distribution across opposed Hypotheses. The One is only substance because it is the support common to all predicates, contradictory or not, that the matrix distributes across it.

We will add moreover that Plato mostly limits in each Hypothesis the risks of excess and limits his attention to the case in hand.

4. The result is that in order to manifest this distributive circulation we had to reduce the One to its signifier alone, i.e. to introduce the plane of language. This is to restate here with regard to the general dialectic what was verifiable in each Hypothesis wherever we introduced this plane (with the distinctions that it involves: language-metalanguage, and the ontology it implies: being and the existence of non-real objects), without which the game [jeu] of the Hypotheses would have been unplayable. The introduction of language is necessary in order to save truth through the sacrifice of the thinkable, which is the sole duty of the logician.

5. The consideration of these aspects or planes [plans] can resolve a last difficulty, one that might arise from interrogating the status of 'our own discourse'.

Our self-examination might proceed as follows: To use a matrix of epistemologies is already to prejudice epistemology itself. To which we would respond: no doubt, but in which place of the matrix is this presupposition located? One can refuse the question, and so on to infinity, but it is already useful to know that we can arrange the exercise of the matrix in any of its various cases by a process of metonymization that amounts to substituting, for the language used, the plane of its metalanguage – or again, to replace in the whole of the preceding discussion 'science' by 'epistemology', and 'epistemology' by the matrix exercise itself. And so whoever claims that to refer to a matrix of epistemologies is the mark of a flagrant scepticism will have done nothing more than reposition this exercise as part of Hypothesis VIII. [73]

We will thus obtain, by generalising from this discussion, the following dialectics of epistemologies (we've grouped the Hypotheses in pairs):
Hyp. I-V  The absolute One is = One sole epistemology is true, but which one? Impossible to know (absolute idealism).
Hyp. II-IV The participated One = One sole epistemology is true, that which communicates to others by division (dogmatism of participation).
Hyp. VI-VIII The participated Non-One = All epistemologies are true, none are privileged (relative scepticism).
Hyp. VII-IX The absolute Non-One = None are true (absolute scepticism).

And finally Hypothesis III, the mediation of all the others, will be no more than the name of the matrix exercise itself.

One will thus choose one's place in the matrix and one will be quite glad (or surprised) to discover neighbours that perhaps one did not know – one's neighbours, which is often to say, one's destiny. But one cannot leave the table. The only bad players are to be found among those who have already been dealt their cards.