HAD WE BUT WORLDS ENOUGH, AND TIME, THIS ABSOLUTE, PHILOSOPHER...¹

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ABSTRACT: In *Logiques des mondes*, Alain Badiou has produced a sequel to his magnum opus *Being and Event*. Whereas *Being and Event* primarily restricted itself to the relationship between ontology and the event, mathematics and poetry, the new book seriously extends and revises certain of its predecessor's propositions in order to construct a logic of different 'worlds'. This article outlines some of the major doctrines, arguments, and motivations for the new work, as well as several points of possible difficulty.

Keywords: Badiou; Kant; Hegel; Logiques des mondes; Being and Event; Category Theory; the Logic of Appearing; Philosophical Sequels; Conditions; the Absolute

'We know that mathematicians care no more for logic than logicians for mathematics. The two eyes of exact science are mathematics and logic: the mathematical sect puts out the logical eye, the logical sect puts out the mathematical eye, each believing that it can see better with one eye than with two'.

—Augustus de Morgan

PREAMBLE

Alain Badiou's most recent book Logiques des mondes presents itself as a sequel to Being

^{1.} This article draws on the following works of Badiou:

Alain Badiou, Logiques des mondes: L'être et l'événement, 2, Paris, Seuil, 2006 (LOW).

Alain Badiou, On Beckett, trans. and ed. N. Power and A. Toscano, Manchester, Clinamen, 2003 (OB).

Alain Badiou, Being and Event, trans. O. Feltham, London, Continuum, 2005 (BE).

Alain Badiou, Briefings on Existence: A Short Treatise on Transitory Ontology, trans. N. Madarasz, New York, SUNY, 2006 (TO).

Alain Badiou, Conditions, Paris, Seuil, 1992 (C).

Alain Badiou, Le Siècle, Paris, Seuil, 2005 (LS).

Alain Badiou, Théorie du Sujet, Paris, Seuil, 1982 (TS).

and Event. But what is a philosophical sequel? What are the conceptual consequences for a philosophy for which a sequel has come to seem necessary? To answer this question, I begin by identifying certain key features of Badiou's position in BE, particularly regarding the 'absoluteness' of philosophy's conditions. These conditions—science, love, art and politics—prove absolute insofar as they are inseparably *contingent* in their emergence, immanent to their situations, self-supporting in their elaboration, indifferent to all existing forms of self-interest, egalitarian in their address, and restrained in their extension. Philosophy is a transliteration of the singular injunctions delivered by these conditions, and the recomposition of these effects in a system. Several aspects of BE, however, harbour certain difficulties. For example, in regards to the details of subjective variation, the relation between events and their sites, the local status of bodies and situations, and, above all, in leaving aside the relation between mathematics and logic. In Logiques des mondes (the title translated here as Logics of Worlds), Badiou confronts these difficulties. Using category theory, Badiou tries to forge a 'Grand Logic' able to account for the specificity of worlds and the local apparition of events, without abandoning his doctrine of the transmundane nature of truths. This review argues that the attempt—though overwhelmingly brilliant—is confusing, and its execution not altogether effective. LOW wavers because it revivifies, despite itself, Hegelian elements that, in the absence of the Hegelian dialectic, entail treating conditions as examples. When reduced to examples, truths are no longer conditions of but objects for philosophy; as objects, however, these truths cannot support philosophy in the way that it requires; without such support, philosophy collapses into a 'theory' of the logic of appearances. Or, to put this another way, LOW is an extra-philosophical work, concerned to delineate the possibility of such situations as the ontological, rather than working directly with such situations itself. Symptoms of such a philosophical 'extraneousness' are evident in the book's escalating rhetoric, its proliferation of examples, its unclarified structure, and its creation of new problems in the guise of resolving old ones. In a word, LOW is at once too Hegelian and not Hegelian enough. Unlike BE, LOW no longer simply attends to *absolutes*, but tarries with *variabilities*.

I. WORLDS' LOGICS: BEING AND EVENT 2; OR, PHILOSOPHY'S SEQUELA

The first thing you notice about LOW is its size. In its original French edition, BE was just over 560 pages, beautifully printed on heavy paper. LOW is 630 pages long, and the paper and printing seem thinner. The card of LOW's cover is significantly more supple than the cover of BE. You may also be struck that the stark minimalist cover of BE has here been ornamented with the reproduction of a beautiful Hubert Robert painting, of figures bathing before a neoclassical folly in dark woods, the sky rift by sun behind the angling clouds. BE appeared in the series *L'ordre philosophique*, then edited by François Wahl; LOW appears in the same series, which is now directed by Badiou and Barbara Cassin. It may or may not be of significance that Seuil were originally retailing BE for 200 francs, and LOW for 30 euros (though I got mine for 28.50 euros). Times have clearly changed.

The differences aren't due only to design issues and a major currency shift. The title reads: Logiques des mondes: L'être et l'événement, 2. This literally translates as Logics of worlds: being and event, 2. Initially, I was tempted to twist this into Worlds' Logics. Why? First, because 'de' in French can be perfectly well rendered as an English possessive, retaining the irreducible ambiguity of the genitive. Second, Worlds' Logics is such a rebarbative syntagm that it at once detains a force of thought (you do have to think about it), and, as such, is also a reminder that this title has a very particular and significant sense. For me, it suggests something about the pluralization of both 'worlds' and 'logics' that 'logics of worlds' may not. Note the title proper is without articles, definite or indefinite. Third, it is an opportunity to offer contemporary readers a rare example of the correct use of the apostrophe. In the end, however, I have submitted to the most straightforward rendering of the title in English—a rendering that seems to have been peculiarly unpopular to date—but which at least mimes the form of the original and, as the acronym LOW, is much richer than WL.²

Translation issues aside, the next thing you might notice about LOW is its peculiar organization. If you turn to the 'Table' of contents, you are immediately confronted by a labyrinth of peculiar divisions: a Preface, seven Books (each titled) and a Conclusion, each division of noticeably variable length and further subdivided; there are also scholia, technical notes, appendices, avant-propos, information, commentaries and digressions, statements, dictionaries, bibliography, index and iconography; further subdivisions, bristling with titles, sometimes even the same title repeated in different books, sometimes numbered, sometimes not (e.g., 'Existence', 'Atomic logic', 'The inexistent', etc.).

For anyone familiar with the structure and vocabulary of BE, many of the headings here will appear unfamiliar or anomalous. BE is classically and minimally structured. It begins with an account of the philosophical conjuncture into which BE is intervening, and then proceeds, in an orderly fashion—that is, at once logically, chronologically and thematically—from Plato to Lacan, interspersed with what is essentially a course in set theory ontology. LOW, on the other hand, is not ordered classically, chronologically, minimally, or, to the naked eye, logically. In the Preface alone, one finds, alongside a polemic opposing 'democratic materialism' and the 'materialist dialectic', discussions of prime numbers *chez* the Greeks and *chez nous*, of the painted horses of the Chauvet-Pont-d'Arc grotto and Picasso, of Virgil and Berlioz, of radical Chinese political tracts. It is surely significant that LOW does not, as did its predecessor, situate itself in a *philosophical* conjuncture, but in a very generalized, global *cultural* moment (that of 'democratic

^{2.} See, for example, A. Toscano and R. Brassier, 'Editors' Note' in A. Badiou, *Theoretical Writings*, London, Continuum, 2004, pp. ix, x, where they speak of *The Logics of Worlds*, whereas Norman Madarasz has recourse to *World Logics* in his translation of Badiou's 'Preface' in TO, p. xi. As for Steve Corcoran and Bruno Bosteels, they give *Logics of Worlds* in their translation of 'Logics of the Site' in *Diacritics*, vol. 33, nos. 3-4, 2003, pp. 141-150. Moreover, in their unpublished 'Postface: Aleatory Rationalism' (written 2003) to *Theoretical Writings*, Toscano and Brassier do indeed speak of *Logics of Worlds*. This already gives us, bizarrely, four possibilities for what seems an eminently straightforward title. David Bowie fans will surely appreciate the acronymic allusion here to his magnificent album of the same name.

materialism'). As one progresses through the book, the logic of the presentation of category theory begins to take precedence, until, finally, the formalisms tail off to end with propositions entirely in natural language. There is certainly a kind of structure here, but it is less clearly rigorous and less self-evident than its predecessor's.

I will come back to this question of structure more directly below, but I wish to broach it here by asking a particular, if perhaps unusual, question: What does it mean to write a philosophical sequel? In the case of Hollywood, the necessity for a sequel is very clear: it is audience receipts. In the case of philosophy, the necessity for a sequel is, on the contrary, highly obscure. It's not usually sales that determine success. As David Hume notoriously remarked of his own Treatise on Human Nature, 'it fell dead-born from the press? Such a lack of public approbation, however, is hardly an argument against the value of a book (especially not one that Immanuel Kant said woke him from his 'dogmatic slumbers').3 Still, aside from metaphors of continuing to rudely awaken people despite your demise, it's hard to know what constitutes philosophical success, let alone what sort of philosophical success might demand a sequel. If a philosophical work is a success, surely that precludes a sequel? You've said what needed to be said: you can now spend the rest of your life reiterating, rewriting, or recanting your program. If you add a proposed second volume, that hardly constitutes a sequel; a systematic work in no matter how many volumes is not a sequel. In philosophy, a sequel perhaps implies that the 'original' was in some way a failure, somehow deficient, requiring supplementation or correction—and yet, somehow, the intervention you can't help but follow.

You may get something of this sense from Hegel's problems with sealing up his system. In his 'Preface to the First Edition' of the *Science of Logic*, he writes:

As regards the external relation, it was intended that the first part of the *System of Science* which contains the *Phenomenology* should be followed by a second part containing logic and the two concrete [realen] sciences, the Philosophy of Nature and the Philosophy of Spirit, which would complete the System of Philosophy. But the necessary expansion which logic itself has demanded has induced me to have this part published separately; it thus forms the first sequel to the *Phenomenology of Spirit* in an expanded arrangement of the system. It will later be followed by an exposition of the two concrete philosophical sciences mentioned.⁴

The philosophical system that presents the Absolute System finds itself forced into a 'necessary expansion', determined by 'logic itself'. As Martin Heidegger glosses the transmogrification:

Soon after the appearance of the *Phenomenology of Spirit* in 1807, Hegel began publishing a work known as the *Logic*. The first volume of this work appeared in

^{3.} Jon Roffe has alerted me to the fact that Kant may never have read Hume's *Treatise*, but relied on secondary sources for his information about the problem Hume raises in regards to causation. I would like to take this opportunity, too, to thank both Roffe and A. J. Bartlett for their comments on an earlier draft of this review.

^{4.} G.W. F. Hegel, *The Science of Logic*, trans. A.V. Miller, Atlantic Highlands NJ, Humanities Press International, 1996, pp. 28-9.

1812/13, and the second volume in 1816. But the *Logic* did not appear as the second part of the system of science. Or is this *Logic*, in accord with the matter at issue therein, the remaining second part of the system? Yes and no...⁵

'Yes and no': what I want to underline at this point is that Hegel, a philosopher notorious for enforcing a total and systematic approach to philosophy, is himself forced to alter his declared presentation so significantly that the system that the original purports to present must itself be reorganized according to new criteria that retrospectively transform its essence. Yet this very transformation continues to pursue its singular divagation in the wake of the original. I will return below to the consequences of Hegel's systemic-reconstruction-in-process. Here, however, I want to mark just how tightly the problem of the philosophical sequel is articulated with, first, the problem of the absolute and, second, with the problem of system. One might suggest that sequels tend to force out an impossibility of articulation between the two, as they betray the intervention of new concepts. A sequel makes its predecessor the one that it was not (or had not been). The whole—or at least its non-existence or its impossibility—is at stake in a sequel.

Which is why it is not surprising that philosophy begins with a man who writes nothing but sequels. The same action hero returns, again and again, hurling himself enthusiastically into dangerous and extreme situations; one rediscovers familiar figures and locations, which are then rendered uncanny by the events in which they are summoned to participate; a battery of narrative special-effects are placed in the service of a ceaseless conceptual warfare. All of which makes the Platonic dialogues extremely difficult to decipher. Is Socrates the same character throughout the dialogues? How does he change? Why? How close a resemblance does he bear to the 'historical' Socrates? Especially since this Platonic character Socrates dies, then returns to life, to circumstances which are painfully fictional or rankly impossible. What are the consequences for the elaboration of concepts given this swarming of personae? And so on. The complexity of the relation between continuity and rupture in the presentation and capture of concepts is not just implicit, but itself exposed and put to work in and by such a serial presentation, to the extent that 'continuity' and 'rupture' must themselves be re-conceptualized in order to fulfil the demands of philosophy.⁶

Nor is it then surprising, given Alain Badiou's declared Platonism, that LOW, his most recent book, presents itself as a sequel to his indisputable *magnum opus*, BE. As the

^{5.} M. Heidegger, *Hegel's Phenomenology of Spirit*, trans. P. Emad and K. Maly. Bloomington and Indianapolis, Indiana University Press, 1988, p. 2. As Heidegger continues, 'Why is the title *System* omitted as early as 1812? Because between 1807 and 1812, a transformation was already underway. The sign of the initial transformation in the idea of the system can be seen in the fact that the *Logic* not only loses the main heading but also stands separately, by itself—not because it turned out to be too detailed, but because the *Phenomenology* is to take on a different function and position in the fluctuating arrangement of the system. Because the *Phenomenology* is no longer the first part of the system, the *Logic* is no longer its second part', p. 4. Indeed, the entire 'Introduction' is of pertinence here, pp. 1-42. I would like to thank Paul Ashton for reminding me of these passages, as well as for his detailed commentary on these issues (personal communication).

^{6.} To follow this line of thought, could then not Aristotle's *Physics* and *Metaphysics* be thought according to a logic of the sequel?

back cover blurb puts it, LOW 'is conceived as a sequel [une suite] to his previous 'great' book of philosophy'. Why? Badiou himself notes that, despite several of his books proving genuine 'bestsellers' in the wake of BE, this economic success was no index of philosophical triumph. On the contrary, his doubts only grew about several aspects of his own work. Was Badiou about to expel himself from his own paradise? In the 'Preface' to the new English translation of *Court traité d'ontologie transitoire*, Badiou puts it like this:

From the middle of the 1990s, what slowly grew to become most evident to me were the difficulties of my undertaking. Happy times were coming to a close. I told myself: 'The idea of event is fundamental. But the theory I propose on what the event is the name of is not clear'. Or: 'The ontological extension of mathematics is certain. But, then, what about logic?' Many other doubts and questions ensued (TO, ix-x).⁷

What is striking about the problems of philosophical sequels (or, if you're happy to contract a epidemiological pun, the *sequela*) is that they constitute a *return to oneself*. Jacques Lacan notoriously called for 'a return to Freud', meaning—not a return to dogmas or doctrines of the master—but to the *impasses* of the Freudian text. It is to the turbulent traces of Freud's own failed solutions to the unprecedented deadlocks his discovery of the unconscious generated that Lacan attends. So when, in BE, Badiou proposes the clarion-call of a 'return to Plato', his call should be taken in this vein. A return to Plato is not just a return to the Platonic dogmas, but to the rifts and opacities of the Platonic text; rifts and opacities, however, that would have been unthinkable before Plato's 'interruption' of poetry by mathematics.

Yet both Plato and Freud were, for the reasons I have been implying, *already* caught up in their own process of return to their own earlier work, and it is this returning—to the impasses thrown up by a founding intervention—that constitutes the development of their work. A return always returns to return. But it does so on the basis of an interruption that exceeds any sufficient reason. In Plato, this interruption is called Socrates; in Freud, it is called the symptom. Which makes a sequel different from just another book by the same author: it is a return to one's own failures to have thought what renders possible and necessary such a return.⁸

^{7.} See A. J. Bartlett's review of TO elsewhere in this issue of *Cosmos and History*. As Bartlett (and others) have noted, the English in TO can be imprecise and confusing.

^{8.} One should then note the perhaps surprising profusion of sequels in contemporary European philosophy: I think immediately of Michel Foucault's *History of Sexuality* volumes, as well as Michel Serres's *Hermès* sequence, Deleuze and Guattari's *Anti-Oedipus* and *A Thousand Plateaus*, Giorgio Agamben's *Homo Sacer, Remnants of Auschwitz* and *State of Exception*, etc. Badiou himself has a little sequence of volumes entitled *Circonstances* (collections of little articles that have appeared elsewhere), and speaks of his own temptation to publish a *Conditions 2* (cf. 'Preface' to TO, p. xi). But it's necessary to be careful: not every numbered sequence constitutes a sequel in the sense I am speaking of here; nor are unnumbered titles not necessarily sequels. Badiou: 'Let us note that *Briefings on Existence. Short Treatise on Transitory Ontology* is part of a trilogy, which is already more tentative than the unity of the *Conditions* volume. Published simultaneously with it was the *Petit manuel d'inesthétique....*There was also the *Abrégé de métapolitique*', TO, p. xi. Moreover, a sequel is not a 'carefully orchestrated succession of works dealing with problems in a clearly discernible sequence, as in Bergson', 'Author's Preface' in *Theoretical Writings*, p. xiii. And a proposed sequel may never appear at all: where's

One could give this sequaciousness of philosophy a number of different names, such as those that Badiou himself has explored in some detail elsewhere. In *Le Siècle*, he gives Chapter 8 the title of 'Anabasis', drawn from a famous memoir of Xenophon, student of Socrates, contemporary of Plato. Badiou writes: 'In the trajectory it names, anabasis leaves undecided the parts respectively allotted to disciplined invention and uncertain wandering. In so doing, it constitutes a disjunctive synthesis of will and wandering. After all, the Greek word already attests to this undecidability, since the verb αναβανειν ("to anabase," as it were), means both "to embark" and "to return." If Badiou here invokes anabasis in the context of a discussion of Saint-John Perse and Paul Celan, it is also present—if not named as such—in the discussion in LOW, under the heading of 'referents and operations of the faithful subject':

Let's suppose that, following the revolt of a handful of gladiators around Spartacus in 73 BCE, the slaves—or rather, *some* slaves, if in large numbers—made a body, instead of being dispersed in groups. Let's accept that the trace of the revolt-event be the statement: 'We, slaves, we want to return home [*chez nous*]'. Is the subject form the operation by which the new 'body' of slaves (their army and its dependents) joins itself to the trace?...Its materiality is the consequences drawn day after day from the evental trace, that is, from a principle *indexed to the possible*: 'We, slaves, we want to *and can* return home' (59).

Once you recognize this operation, you might begin to discern it everywhere in Badiou—if under a sequence of ever-varying names. In an essay on Beckett that first appeared in French in Conditions, and now appears in English in On Beckett, Badiou pinpoints a serious shift in Beckett's work of the 1960s. It is from this shift that Badiou is able to draw the lesson that every generic procedure 'weaves within its singular duration these four functions: wandering, immobility, the imperative, and the story' (OB 32). For Badiou, it is important not to reduce the shift in order to discern the return of return; to add to our list of pertinent features of the sequel, this raises the question of time. The sequel's double-blow, its irreducible Twoness, can't help but make one think of various utterances of Badiou's, e.g. 'Time...is intervention itself, thought as the gap between two events' (BE 210) or 'the structure of the ultra-one is the Two' (BE 210); or, in LOW, drawing on the 'striking' examples of Spartacus and Archimedes, 'we will call this destination resurrection, which reactivates a subject in another logic of its appearing-in-truth' (74). In any case, the return or resurrection must be a return to unprecedented possibilities in and of the present, founded on the contingency of an evaporated event and its uncanny trace.

In other words, it is not the bestselling success of BE that founds the necessity for a sequel, but, beyond whatever its (perceived) errors, insufficiencies, and obscurities might be, there is a truth to continue across the interruption (i.e., a cleft of non-relation). As a sequel then, LOW announces itself as: a *reiteration* of certain ideas of BE, notably the

Being & Time 2? There is something unplanned about a philosophical sequel (or its failure to appear).

9. A. Badiou, Le Siècle, Paris, Seuil, 2005, p. 121. I am indebted to Alberto Toscano for use of his excellent draft translation of this book, which I rely on here.

proposition that 'mathematics is ontology'; a revision of certain claims of BE, notably the theory of the subject and event; a replacement of certain concepts, notably that of 'situation' by 'world'; an extension of certain tendencies of BE, notably the much fuller account given of logic; and a supplementation of certain minimal elements of BE, notably in the descriptions of political and artistic processes. Yet there is a final aspect: LOW wishes also to complete BE, to fill in its holes and answer its critics. This (inexpungible but illegitimate) desire will, as we will see, have serious consequences for LOW's structure. Reiteration, revision, replacement, extension, supplementation, and completion: we find that Badiou himself is obsessed with the problem of the sequel, which returns throughout his post-BE work under an extraordinary smattering of diverse names. It is in the scattered light of this embarkation-return and disciplinary-archiving ('sequel', 'anabasis', 'resurrection')—which, on Badiou's own account, always produces a new body and new possibilities—we will examine what becomes of BE in LOW. Whatever else one can say, Hollywood cinema and philosophical sequels clearly do have something in common. For both, sequels are a common modality of the generic.

II. PHILOSOPHY AS CONDITIONED, CONDITIONS AS ABSOLUTES

What made reading *Being and Event* such a deranging experience was that its author had clearly touched upon an *absolute*. Deven if you end up disagreeing with every proposition in that book, it is nonetheless impossible to read and not agree that contemporary philosophy will have to change in its wake—whether in the guise of affirmation, extension, critique, resistance, rejection, or some other operation. The asceticism of its presentation, the assuredness of its declarations, the rigour of its structure, the inevitability of its development, the universality of its ambition, all help to render BE an event in the thought of being. In this regard, Badiou's account in his 'Author's Preface' to the recent English translation of BE perhaps errs on the side of *politesse*:

Soon it will have been twenty years since I published this book in France. At that moment I was quite aware of having written a 'great' book of philosophy. I felt that I had actually achieved what I had set out to do. Not without pride, I thought that I had inscribed my name in the history of philosophy, and, in particular, in the history of those philosophical systems which are the subject of interpretations and commentaries throughout the centuries (xi).

What makes BE such a 'great' book? Among its major claims are the following:11

- Plato is the founding moment of philosophy
- Plato founds philosophy insofar as he interrupts poetry's revelation of presence by means of pure mathematics
- This interruption also entails the rethinking of love and politics
- Plato therefore founds philosophy on extra-philosophical conditions

^{10.} See Jon Roffe's review of Being and Event in this issue of Cosmos and History.

^{11.} Although it is true that many of these claims are only fully rendered clear, explicit and distinct in accompanying texts such as *Conditions* and *Manifesto for Philosophy*, they are implicit in BE.

- There are four, and only four, of these conditions
- These conditions are irreducible to each other
- These conditions are mathematics, poetry, love and politics
- The conditions are truth procedures
- The foundation of philosophy was an act that organized these conditions into a system
- To do philosophy is to remain faithful to this founding act
- Remaining faithful to this foundation entails the construction of a system according to the contemporary directions proposed by these conditions
- These contemporary directions enjoin: attending to set theory, attending to poetry, attending to post-Revolution emancipatory politics, attending to psychoanalysis qua love
- This attention will result in ideas, such as 'mathematics is ontology', 'poetry delivers the matheme of the event', 'politics engages the universality of address', 'love is the struggle of the non-relation'.

Although it is necessary to be telegraphic in the present context, there are a number of details that must be clarified, above all, the concept of 'condition'.

The concept is best explained by recourse to Badiou's claims about mathematics. Pure mathematics is the paradigm of deductive rationality. Anyone can do mathematics, yet anyone who does mathematics will be constrained to the same results; or, more precisely, to the same points of undecidability. Such mathematics has no empirical reference. Mathematics clarifies the problems about which one can rationally speak, and how one must speak of them (i.e., to invoke 'infinity' today outside of its post-Cantorian acceptation is mere *flatus vocis* or obscurantism). Its verification is *immanent* to its practice; indeed, verification and practice are *inseparable* in regard to mathematics. Mathematics is therefore in this sense indubitable, obeying only its own procedures. Anyone doing mathematics must accord with these procedures and their results. Mathematics is therefore also *egalitarian*: all are literally equalized in their submission to its procedures.

Its conditioning by mathematics means philosophy has an unbreakable commitment to the most rigorous possible form of rationality. This rationality is detached from any direct empirical influences whatsoever (i.e., not only from history, social mores, sexual, ethnic, religious differences, etc., but from the vicissitudes of natural languages themselves). Moreover, the limits of mathematics are rigorously given within mathematics itself. These features have further consequences pertinent here. First, one cannot judge mathematics by any external criteria; only mathematics is adequate to its own reason. Philosophy must follow the lead of mathematics, not the other way around. Second, philosophy must take reason as far as it can go; if one starts to follow mathematics,

^{12.} Significantly, Badiou insists that each generic procedure has an affect proper to it. In *On Beckett*, he writes: 'Happiness also singularizes love as a truth procedure, for happiness can only exist in love. Such is the reward proper to this type of truth. In art there is pleasure, in science joy, in politics enthusiasm, but in love there is happiness', p. 33. He repeats this schema verbatim in LOW. See the excellent little Tableau 1, p. 86 (reproduced below).

one must follow it to the bitter end. Third, in doing so, philosophy must be prepared to rupture with all social prejudices, even and especially one's own. Four, mathematics cannot, for all that, be permitted to totalize what happens; indeed, mathematics explicitly theorizes and prohibits its own totalization.

After all, what happens radically exceeds mathematics. How could one talk of a mathematics of love or politics or, indeed, poetry, when it is precisely their extra-deductive character that is essential to these genres? For Badiou, love, politics and art are also genres that have a genuinely thoughtful kernel—if the materials and operations by which they reason cannot be anticipated by deduction. As we shall see, these genre-conditions can (after the fact) be *formalized* by mathematical means by philosophy (e.g., in 'mathemes'), but their apparition is due only to ungovernable Chance and their process of their development entirely subjective. Moreover, each of these genres deals with a different aspect of human creativity: art with the problem of being emerging as absent presence; love as the problem of sustaining an encounter with a non-dialectizable 'other'; politics as the problem of non-totalizable universality.¹³ And mathematics has a particular claim on our philosophical attention. Badiou notoriously declares that 'mathematics is ontology, a statement to which we will return in the next section of this review. These genres are founded in 'events', that is, as non-deducible, illegal occurrences in a situation whose consequences may come to bear on the experiences of all. Truths rupture History. For Badiou, all the genres share the following features. They are: contingent in their emergence, immanent to their situations, self-supporting in their elaboration, indifferent to all existing forms of self-interest, egalitarian in their address, restrained in their extension. It is this six-fold aspect that renders truths (or, more precisely, the event-subject-truth process) absolute. Note how contingency and restraint (non-totalization) here become part of what it means to be absolute, a radically untraditional conception; note that self-supporting means 'bearing its reason within itself' and 'supported of/by a self [subject]'; note that indifference includes 'excepting itself from pre-existing forms of temporality, as time is usually practised as an exemplary form of self-interest; note that egalitarian is synonymous with 'bearing universal address', and so on.¹⁴

^{13.} How Badiou differentiates these conditions from text to text is of extreme interest. In *The Century*, he notes that 'science...possesses problems; it does not have a project', while in *Conditions*, he shows how love and politics begin at each other's rear ends, so to speak. For Badiou, if one condition comes to dominate one or another (or indeed all) of the others, this entails what he calls a 'suture': under such conditions, philosophy itself disappears, and the conditions may start to take on the roles that are properly the province of philosophy (e.g., poetry in the post-Romantic era starts to think Being).

^{14.} I believe these features are plausible, even compelling, as a *description* of the peculiarities of these four 'discourses'. Empiricist and anecdotal as such a remark may be, I can verify that English political activists, Italian historians and Australian artists have also found this compelling as a description of their practices. It also strikes me that these features also constitute an immanent philosophical justification—or, to use the more bombastic term favoured in recent French thought, an 'affirmation'—of these practices. Philosophy must affirm the extra-philosophical thoughts that make it possible. Finally, this coupling of description and justification enables a third moment, an 'explanatory' one, e.g., 'mathematics is ontology'. What such statements present is a purely philosophical seizure of the status of the particular discourse. Description-justification-explanation: if you will excuse such teminology, it is still possible to accept that this is one of the

Philosophy is to construct a system on the basis of the four conditions, and on these four *alone*. Why? As Badiou reiterates in *Logiques des mondes*:

The fact is that today—and on this point things have not shifted since Plato—we know only four types of truths: science (mathematics and physics), love, politics and the arts. We can compare this situation to Spinoza's report concerning the attributes of Substance (the 'expressions' of God): there are undoubtedly, Spinoza says, an infinity of attributes, but we, men, know only two, thought and extension. Perhaps there are, we will say, an infinity of types of truths, but we, men, know only four. However, we know them truly. In such a way that our relation to truths…is absolute (80).¹⁵

I have italicized the word absolute in the final sentence above, because it is precisely the status of our relation to the conditions as absolute that I want to emphasize here. No other 'human' practices can provide such an absolute. This 'absoluteness' is, as I have been concerned to specify, of a very precise if peculiar kind. Philosophy really must be conditioned by these absolutes. How Badiou does this will become apparent to anyone who reads BE carefully: he directly transliterates the operations of the conditions into philosophical jargon. There's hardly more to it than that. The axioms of set theory provide all the necessities for the ontology; the operations of poetry provide the matrix for an extra-rational thought of the event qua undecidable (see, in particular, Meditation 19) on Mallarmé). By means of such a transliteration, philosophy constructs its own 'ideas'. These ideas are phrased in such terms as 'mathematics is ontology'. This means that, as Oliver Feltham puts it in his 'Translator's Preface' to BE, a philosophical idea is at once 'a decision, a principle and a hypothesis' (xxii), one which could only have been generated out of some kind of confrontation with conditions. The absolute forces questioning, not any kind of belief. Indeed, 'condition' should also be given the logical flavour of the *conditional* for its subjects: *if* this event, *then* what are the consequences?

So Badiou's absolute conditions are clearly not the Hegelian Absolute. There is no Whole; there is no single overarching logic of presentation, developmental or not; there is no necessity to a truth, nor essence of truths; there is no temporalization of the concept, etc. In general, it cannot be philosophy's task to try to think everything; indeed, for Badiou, philosophy is necessarily a precarious discourse, for at least three reasons. The first of these, the 'pragmatic reason', is that, dependent as philosophy is on its conditions, not all these conditions are functional in all epochs and places: in such cases, philosophy itself must disappear. The second reason, the 'bad reason', is that philosophy, consistently tempted to think outside the square, dissolves itself in the temptation to think the non-existent 'whole', either ossifying into overweening dogmatism or reducing itself to

knots that philosophy should tie.

^{15.} The paragraph begins 'a truth is certainly an experience of the inhuman. However, "our" point of view that forges (in philosophy) the theory of truths and subjective figures has a price: we cannot know if the types of truths we experience are the only possible ones. Other species, unknown to us, or even our own species, at another stage of its history (for example, transformed by genetic engineering), can, perhaps, accede to types of truths of which we have no idea, and even no image', LOW, p. 80.

just another way of describing the incoherent slew of empirical happenings (for example as a glorified grammarian or sociologue, as a physicist manqué or psychologist). The third, 'good reason', is that, even when these conditions are all available, they are themselves exceptionally difficult to grasp; every 'successful' philosophy is therefore, at best, built on a constitutive instability. There is no totality to think, only the contingent becomings of heterogeneous event-truths and their subjects. Philosophy tries to seize on the ideas these conditions induce, as axioms of and for action. ¹⁶ This is the fundamentally *affirmative* movement of philosophy. It is the 'void place' constructed by philosophy to enable the heterogeneous truths produced by its conditions to meet, that Badiou refers to as 'Truth'. The difficulties of doing so entails that the absolute in philosophy is not something one can relax into, like a warm bath or a reliable security system, but, on the contrary, involves the savage wrenching-away of every certainty, the embrace of incalculable risk. Worse still, this savagery of the absolute is quiet, fragile, almost indiscernible....

Despite the brevity of this summary, it should be clear how Badiou takes his distance from theology and analytic philosophy on the one hand; and the extreme affects of religious beliefs, on the other. One must not underestimate this aspect of Badiou's work, which, having pure reason as a paradigm, induces him to repudiate all forms of religious and theological thought. This does not mean that he does not engage with examples of such thought. On the contrary, he makes committed interventions into such thought, by essaying to detach what he *de facto* treats as the pure thought of such thinkers from the 'religious' impurities in which they are inextricably enmired. In this approach, somebody like Saint Paul becomes an exemplary *political* militant and thinker, who ought to be extracted from his religious envelope, including from the history of the church.¹⁷

This is why I sometimes characterize Badiou's philosophy as a 'SLAP philosophy': philosophy not only integrally relies on Science, Love, Art and Politics, but it gives you a slap to awaken you from the nightmare of history. Moreover—and I apologize for the cheesy sloganizing here—one can usefully permute these letters as a handy mnemonic for Badiou's doctrines. The work of fidelity can be considered long, protracted, repetitive, difficult: it's like doing LAPS. But if one persists, one acquires PALS in this enterprise, that is, philosophical friends with whom you also engage in questioning around the status of truths and Truth. As such, you'll attain the heights of thought in those philosophical ALPS presently 'icy with forgetting and desuetude' (and maybe get some skiing in while you're there). SLAP \rightarrow LAPS \rightarrow PALS \rightarrow ALPS: the permutations of philosophy.¹⁸

I have begun with a protracted review of what may now appear, after many years of commentary, very familiar, even merely introductory, platitudes about Badiou's system. I do not, however, believe this to be the case. One of the difficulties that commentators

See A. Badiou, Infinite Thought, ed. and trans. J. Clemens and O. Feltham, London, Continuum 2003,
 54.

^{17.} See A. Badiou, *Saint Paul: The Foundation of Universalism*, trans. R. Brassier, Stanford, Stanford UP, 2003. 18. O, the fortuity if not fatuity of acronyms!

have so far had is taking seriously the concept of 'condition'. To the extent that they do so, they miss Badiou's utter reliance on his conditions. Cantorian set-theory really is ontology for Badiou; Mallarmé's poetry really does provide the matheme of the event. These are not 'examples', no matter how subtly one thinks the problematic of the example. They are absolutes. As such, they are the only possible foundations for a philosophical system.

III. FROM MATHEMATICS TO LOGIC; FROM SITUATIONS TO WORLDS; FROM BEING TO BEING-THERE; FROM ESSENCE TO APPEARANCE; FROM SUBJECTS TO OBJECTS; FROM CONDITIONS TO TRANSCENDENTALS

As I have noted, many things remain the same between BE and LOW. Mathematics remains the science of being, and truths remain exceptions to existence. Badiou puts it like this: 'There are only bodies and languages, except there are truths', as a kind of slogan of what he here denominates his 'materialist dialectic', to distinguish it from the common or garden kind of 'democratic materialism' dominant today. The slogan's syntax is explicitly Mallarméan—the stars its destination—to demarcate it from the repulsive 'modesties' of philosophies of finitude. Whereas democratic materialism believes that 'there are only individuals and communities', the materialist dialectic proclaims that truths are accompanied by the eclipsing of all individuation and community. Truths are eternal, infinite, generic; they are supported by depersonalized, 'inhuman', subjects. As we have seen, part of the point of conditions is to think affirmatively, i.e., proceed on the basis of positive constructions alone. BE's procedure continues in LOW. As Badiou says, 'In no way do I go back on all this' (45).

What, then, has changed between BE and LOW? As the title of this subsection announces, there are a number of key changes in the vocabulary, argumentation, organization and references. The aim for Badiou is to reconfigure his existing concerns in a different framework, that is, according to 'the singularity of worlds where [truths] appear' (45). With this in mind, Badiou elaborates a fuller account of subjective variation, a revised account of the event, a new account of appearance, a new concept of objectivity, an extended account of logic (by shifting from set theory to category theory), and so on. On his own account, however, the 'most considerable stake of LOW is to produce a new definition of bodies, understood as truth-bodies, or subjectifiable bodies' (44). To do this, however, Badiou has to reformulate the status of logic itself. In this new dispensation, "logic"

^{19. &#}x27;Eilenberg and Mac Lane created categories in the 1940s as a way of relating systems of algebraic structures and systems of topological spaces in algebraic topology. The spread of applications led to a general theory, and what had been a tool for handling structures became more and more a means of defining them. Grothendieck and his students solved classical problems in geometry and number theory using new structures—including toposes—constructed from sets by categorical methods. In the 1960s, Lawvere began to give purely categorical definitions of new and old structures, and developed several styles of categorical foundations for mathematics', C. McClarty, *Elementary Categories, Elementary Toposes*, Oxford, Oxford University Press, 1992, p. 1.

and "consistency of appearing" are the same thing (47), and it is from this point that he returns to the problem of the subject.

For Badiou, a subject is not a register of experience, a moral category, or an ideological fiction ('three dominant determinations' of the subject); on the contrary, it is an index of the real, born of an event, faithful to the trace. Though a political subject is as different from a subject of love as that subject is from a subject of mathematics, etc., each subject must be formally thought according to the same concepts. In BE, this subject is a 'finite quantity of truth'. From the standpoint of BE's conception, then, individuals that didn't assent or remained indifferent to the event were implicitly considered by Badiou to remain mere state agents, agents of inertia. As such, they were not held to be, stricto sensu, subjects. In BE, a political reactionary is not a subject; an academic painter is not part of a truth process; nor are the surgeons who sneered at Lord Lister's absurd obsession with hygiene, and sharpened their scalpels on their boots; nor those who reduce love to a pure biological function or a category of euphemistic illusion. This is a central instance of the binary minimalism of BE: if there is a subject, it must be affirmative; if it is not affirmative, it is not a subject. In LOW, however, to this basic model of the faithful subject, Badiou has added two (or three) more categories: the reactionary, the obscure and the resurrected. Spartacus's slave revolt is his primary example in this initial delineation.

Badiou has had to do this in order to explain how, in the responses to the emergence of a faithful subject, reactionaries too are perfectly capable of inventiveness (or, rather, are forced to be so). As he writes: 'To resist the call of the new, it is again necessary to create arguments of resistance adjusted to the novelty itself. From this point of view, every reactive disposition is contemporary with the present against which it reacts' (62). What's typical of such a subject is that it works to extinguish the present that a faithful subject has opened, denying its possibilities and powers through 'the negation of the evental trace'. Don't revolt, it's not worth it, you'll just end up getting yourself crucified on the Appian Way. Or: all things in moderation, just slow down, we'll set up some committees to look into gladiatorial affairs and maybe have a sausage-sizzle too. Here Badiou invokes André Glucksmann and his cohort of nouveaux philosophes as contemporary imagos of such reactionary moderation.

But we also find an 'obscure' [obscur] subject: 'What relation can a patrician of ancient Rome have to the alarming news that assails him concerning the slave revolt? Or a Vendean bishop learning of the downfall and imprisonment of the king?' (67)²⁰ Well, what they want is 'the pure and simple conservation of the prior order'. The obscure subject wants above all to repress the present, to repel the event in the name of a

^{20.} There is absolutely no question that Badiou has drawn this term 'obscur' from what must be one of his favourite poems, Mallarmé's sonnet on Edgar Allan Poe, in which we read of the 'Calme bloc ici-bas chu d'un désastre obscur...' Badiou's allusions to this verse occur in all sorts of contexts: his novel is entitled Calme bloc ici-bas, another little volume on politics is D'un désastre obscur, and so on and on. Aside from the resonances of such allusions, one should undoubtedly hear in 'obscur', not only 'unclear', or 'unknown', but 'dark' and 'gloomy', as well as 'obscuring' and 'obscurantist', etc.

transcendent Body ('City, God, Race'), and, to this extent, obliterate the event and its trace altogether. If the reactive subject wishes to snuff the extremity of the present, the obscure subject wishes thereafter to shovel it under.

So these three figures of the subject all respond to the *present* with different operations: 'the faithful subject organizes its *production*, the reactive subject, its *denial...* and the obscure subject, its *occultation*' (70). One can immediately see how and why the doctrines of BE have been altered; this new attempt retains the method of double affirmation (philosophy affirms the conditions because these conditions are already affirmative in the real), but aims to provide a fuller and more nuanced description of some subjective features evident in reality. Moreover, it suggests why no-one can ignore or remain merely indifferent to or undecided about events. To pick up on one of Badiou's own examples, today God really is dead, and it is this event (some might prefer to call it a 'non-event') that fundamentalists want to occlude at all costs. Yet they betray the patency of God's death in their very attempts at occultation.... What's still missing from this triple figure of the subject is a crucial possibility that I have already flagged: its *resurrection*.

The problem is a very serious one for Badiou: can a truth, once broached, ever be utterly destroyed? Take the avatars of Spartacus himself. They return in the slave revolt of the French Revolution, in the 'black Spartacus' who is Toussaint-Louverture; they return in Karl Leibnecht and Rosa Luxemburg, the Spartacists; they return in Stanley Kubrick's *Spartacus*, where all declaim 'I am Spartacus'; they also return, though Badiou doesn't mention it, in Monty Python's *Life of Brian* ('I am Brian, and so is my wife'). 'Spartacus' therefore returns in very different worlds, in very different circumstances. It is the logic of this resurrection that Badiou is going to have to explicate, that is, how 'the multiplicity of worlds' can be articulated with 'the invariance of truths'. Resurrection is, as I will show, the key, the crucial, figure that governs the entirety of LOW—in line with the very essence of sequels.

For the moment, however, Badiou is able to give only the etiolated lineaments of this figure. These lineaments are summarized at the end of Book I in two (almost excessively) helpful diagrams, one of which I reproduce here (from 86).

Truths	Ontologi- cal back- ground (A)	Evental trace (ε)	Body (b)	Present (local)	Affect	Present (global) (π)
Politics	State and people (representation and presentation) A < St (A)	Fixation of the super- power of the State $\varepsilon \Rightarrow (St (A))$ $= \alpha)$	Organiza- tion	New egalitarian maxim	Enthusiasm	Sequence
Arts	Perceptible intensity and the calm of forms $P \leftrightarrow f$	What was formless can be form $\neg f \rightarrow f$	Oeuvre	New perceptive intensity	Pleasure	Configura- tion
Love	Sexuated disjunction m \(\perp \) f	Undetermined object (encounter) $(\exists u) [m \le u]$ and $f \le u]$	Couple (bi-sexuated)	New existential intensity	Happiness	Enchant- ment
Science	Border of the world grasped or not by the letter $l(\mathbf{w}) \mid \neg l(\mathbf{w})$	What rebelled against the letter is submitted to it $\neg l(\mathbf{w}) \rightarrow l(\mathbf{w})$	Result (law, theory, principles)	New knowledges	Joy	Theory

Table 1—The truth procedures and their singular activation²¹

The 'Scholium' that immediately follows Book I, titled 'A musical variant of the metaphysics of the subject', provides a very full and interesting example drawn from the development of serial music. This section, moreover, offers some excellent summarizing propositions of Badiou's altered doctrine of the subject. Whereas the restraint of BE saw it speak very little of subjective affect—limiting itself at most to two, anxiety and courage²²—LOW insists on a quadrature of affects, terror, anxiety, courage and jus-

^{21.} Note that I have tampered with Badiou's mathemes here. The French for the 'Ontological background' of Politics is, of course, $A \le Et(A)$, that is, $A \le Et(A)$, thus becoming $A \le State(A)$ in English; for the Arts, 'le monde exhibe une forme singulière de la tension entre l'intensité du sensible et le calme de la forme', p. 81. I have here translated 'sensible' as 'perceptible', and hence ' $S \leftrightarrow f$ ' becomes ' $P \leftrightarrow f$ '. Likewise, m for monde becomes w for world, and the ϕ for corps has become ϕ for body. I am as yet uncertain of the value of such a transliteration. In Lacan's case, his mathemes were intended to be 'integrally transmissible', that is, without any translation, e.g., 'a' for 'autre' should remain so in English (and not become 'o' for 'other', etc.). 22. Note that the question of affects arises in BE particularly around the question of the status of poetry, and of the matheme of the undecidable that Mallarmé provides: 'Given that undecidability is a rational attribute of the event, and the salvatory guarantee of its non-being, there is no other vigilance than that of becoming, as much through the anxiety of hesitation as through the courage of that outside-place, both the feather, which

tice.²³ Note that all of these affects are now considered internal and essential moments of *any* truth-process, whereas *each* truth-process has also its characteristic or signature affect. As the table above shows, politics is linked to enthusiasm, the arts to pleasure, love to happiness, and science to joy. Telegraphic as these assignations could appear, it is equally true that they find strong support within the philosophical tradition itself (e.g., think of Spinoza's joy, which is very closely linked to the practice of science; or of the pleasure Kant assigns to the arts, etc.).

But it is really in Books II, III and IV that the full project of LOW gets going. This is 'La Grande Logique', which aims to provide a general theory of the logic of appearing, of objects and their relations, subsuming under its gargantuan umbrella the 'little logic' that is the grammatical and linguistic analysis beloved of analytic philosophy (103). In order to do so, Badiou has recourse—as I have already flagged above—to category theory. If Badiou's deployment of Zermelo-Fraenkel set theory governed the entire conceptual presentation of BE, here the presentation is governed by the necessities of the algebraic proofs. Both set theory and category theory are often considered to be rival 'foundations of mathematics'. As Saunders Mac Lane, one of the doyens of category theory, has remarked, the former axiomatizes sets and their elements, whereas the latter axiomatizes functions, that is, relations—and not elements at all. For his part, Badiou will continue to affirm that set theory is ontology, but that category theory founds the logic of appearing.²⁴

Book II concentrates on the construction of the concept of the 'transcendental'. This constitutes quite a severe departure from the situations of BE. In BE, being [l'être] was

[&]quot;hovers about the gulf", and the star "up high perhaps," BE, p. 198, my emphasis. It is further noteworthy that affects are identified with the subjects of truths, not with philosophy or philosophers; in fact, I cannot think of any place where Badiou discusses an affect proper to philosophy as such.

^{23. &#}x27;Four affects signal the incorporation of a human animal to the subjective process of a truth. The first is evidence of the desire for a Great Point, of a decisive discontinuity, that will install the new world with a single blow, and complete the subject. We will name it *terror*. The second is evidence of the fear of points, of a retreat before the obscurity of all that is discontinuous, of all that imposes a choice without guarantee between two hypotheses. Or, again, this affect signals the desire for a continuity, for a monotone shelter. We will name it *anxiety*. The third affirms the acceptance of the plurality of points, that the discontinuities are at once imperious and multiform. We will name it *courage*. The fourth affirms the desire that the subject be a constant intrication of points and openings. It affirms the equivalence, in regard to the pre-eminence of the becoming-subject, of what is continuous and negotiated, and of what is discontinuous and violent. It is only there that there are subjective modalities, which depend on the construction of the subject in a world and the capacities of the body to produce effects. They are not to be hierarchized. War can be as good as peace, negotiation as good as struggle, violence as good as gentleness. This affect by which the categories of the act are subordinated to the contingency of worlds, we will name *justice*, LOW, pp. 96-7.

^{24. &#}x27;In category theory, the initial data are particularly meager. We merely dispose of undifferentiated objects (in fact, simple letters deprived of any interiority) and of 'arrows' (or morphisms) 'going' from one object to another...the aim is ultimately for the 'obejcts' to become mathematical structures and the 'arrows' the connection between these structures. But the purely logical initial grasping renders the determination of an object's sense entirely extrinsic or positional. It all depends on what we can learn from the arrows going toward that object (whose object is the target), or of those coming from it (whose object is the source). An object is but the marking of a network of actions, a cluster of connections. Relation precedes Being', TO, p. 145.

thought in its raw multiplicity; here, being is thought in its organized localization, as 'being-there' [*l'être-là*] in a 'world'. Every world must have a transcendental organization, around which multiples cohere according to their differing degrees of identity or difference. It is a classical problem—'how to conjoin, in the substance of the soul of the world, the Same and the Other?'—and immediately demands a theory of negation or rather, for Badiou, of the *reverse* [*envers*].²⁵ Badiou gives the reverse 'three fundamental properties':

- I. The reverse of a being-there (or, more precisely, of the measure of apparition [apparition] of a multiple in a world) is in general a being-there in the same world (a different measure of intensity of apparition in that world).
- 2. Of both the reverse and negation it can be said that a being-there and its reverse have nothing in the world in common (the conjunction of their degrees of intensity is null).
- 3. In general, the reverse doesn't have all the properties of classical negation. In particular, the reverse of the reverse of a degree of apparition is not inevitably identical to this degree. And again, the union of an appearing [apparaissant] and its reverse is not inevitably equal to the measure of apparition of the world in its entirety (117-118).

Badiou immediately proceeds to show that: there is no Whole (using an argument directly derived from Russell's critique of Frege); that an existent can only be thought insofar as it belongs to a world; that, nonetheless, there has to be some kind of minimum available, which doesn't appear in a world ('a sort of zero'); there are maximal and minimum degrees of apparition, and so on. He gives an excellent account of Hegel, a formal account of what he calls the 'three transcendental operations' (zero, conjunction and the envelope) of appearing, as well as a brilliant demonstration of the superiority of Badiou's own 'Grand Logic' over 'ordinary logic'. This section is a kind of compressed tour de force, in which the familiar operations of ordinary logic (and/or/implication/negation, the quantifiers) are derived from Badiou's new categories of minimum, maximum, conjunction and envelope. The book concludes with a notice: 'What is a classical world?' There we find that such a world has double negation and excluded middle as valid principles, that 'a classical world is a world whose transcendental is Boolean' (200), and that—as Badiou has said elsewhere—ontology is such a classical world.²⁶ Note the new, subtle and formal justification of set theory as an ontology: a logic is now explicitly given to this

^{25.} I am translating *envers* here as 'reverse' in accordance with the existing translation in *Theoretical Writings*, e.g. pp. 213-219. It is possible that one should see some relation to the mathematics of the 'inverse', but the word for this in French is, precisly, '*inverse*'.

^{26.} In the 'Renseignements' at the back of LOW, Badiou notes: 'It finally appears that the two great Aristotelian principles (non-contradiction and excluded middle), such as are proposed in $Metaphysics\ \Gamma$, condition three logical types (and not two, as has been long believed). One can in fact validate universally the two principles (classical logic), or only the principle of non-contradiction (intuitionist logic), or only excluded middle (paraconsistent logics)', p. 557. Badiou immediately continues: 'the canonical model of classical logic is set theory, that of intuitionist logic, topoi theory, that of para-consistent logics, category theory. These models are more and more general, and negation becomes more and more evasive', pp. 557-558.

decision, whereas in *Deleuze*, it was still being put down to a question of 'taste'.²⁷

Book III 'proposes an entirely new concept of what an object is' (205). The novelty of this concept derives from the fact that Badiou thereby 'constructs an object without subject', that is, that the logic of appearing must be purely *objective*. This will be done through the concept of *indexation*: 'if x and y are two elements of an existent A, and T is the transcendental of the world under consideration, indexation is an identity function \mathbf{Id} (x, y) that measures in T the degree of 'appearing' of x and y. Otherwise put, if \mathbf{Id} (x, y) = p, this means that x and y are 'identical to degree p' in regard to their power of apparition in the world' (206). Having established the atoms of appearance, the very minimum necessary to appear in a world at all, Badiou seeks to explore this 'articulation between the logic of appearing and the ontology of the multiple' (208). In BE, Badiou shows that the 'one' does not exist, being only the self-dissimulating result of an operation of counting; in LOW, the One is rethought as the atom of appearing, as 'the quilting point of appearing in being' (231). Appearing is always localized, it is always being-there, and being-there is inherently bound. If love comes in spurts (as Richard Hell and the Voidoids put it), then existence comes in degrees.

Nonetheless, these degrees of existence are founded on something absolutely real: 'In a general fashion, an atom is a certain regulated rapport between an element a of a multiple A and the transcendental of a world....The postulate of materialism is that every atom is real' (236). (With the proviso, of course, that existence is not a category of being.) This 'real synthesis' is the key to this book. Whereas Kant cannot effectively suture the phenomenal to the noumenal, except at the cost of complex sophistries or causal leaps, Badiou will insist that a real atom 'attests to an apparition, in appearing, of the being of appearing' (231). If this synthesis does not work, then being and appearance cannot be sewn together by Badiou. (This will evidently be one of the key places for commentators to intervene in future essays into the worlds of LOW.) As for the object, it receives its definition at the same time:

Given a world, we call an object of the world the couple formed by a multiple and a transcendental indexation of this multiple, on the condition that all the atoms of appearing whose referential is the considered multiple are real atoms of the referential multiple (233).

The object, in other words, is what bridges 'being' and 'existence'. Even quoting such definitions, which can only hint, in their very difficulty, at the logical sequences that underpin them, it is impossible to convey the enchained rigour of Book III in any adequate way. It provides some of the most difficult formal passages I have read in contemporary European philosophy (I refer interested readers to 310 if they wish to marvel at the incredible little box 'Complete form of the onto-logy of worlds'). Such passages are leavened only by detailed evocations of a political rally at the Place de la République and of the aforementioned Robert painting that graces the cover. Despite the difficulties, you

^{27. &#}x27;As Deleuze would have said, in immediately taking up again, just as I would myself, the thread of the argument and the desire to seduce or to win the other over: it is a question of taste', A. Badiou, *Deleuze: The Clamor of Being*, trans. L. Burchill, Minneapolis, University of Minnesota Press, 1999, p. 92.

can't help but get the drift: 'Existence is at once a logical and an intensive concept' (285). There are a number of other noteworthy moments, such as the demonstration that phenomenology and vitalism share a non-philosophical enthusiasm for death, an enthusiasm which exposes their weaknesses: 'just like existence, death is not a category of being' (285). No, death is a category of appearing (we will return to some consequences of this below). And the book concludes with the aptly-titled 'Scholium as impressive as it is subtle', in which Badiou gives a stunning example, a 'logical evaluation' of a battle between Alexander the Great and the Persian emperor Darius....

Book IV concludes the 'Grand Logic' part of LOW, with a new thought of 'relation'. Relation must depend on objects, and not at all the other way around; this is why the Grand Logic moves from object to relation, and why there is a purely logical order at work in LOW. To allude to a statement of Deleuze, no relation here is prior to or external to its terms:

A relation is a bond between objective multiplicities—a function—that creates nothing in the order of intensities of existence or in the order of atomic localizations that was not already prescribed by the regime of apparition of those multiplicities (317).²⁸

For Badiou, the very 'infinity of a world (ontological characteristic) entails the universality of relations (logical characteristic)' (318), and that this universality be a consequence and not a postulate. This book's major examples are drawn from the world of Quebec, its objects, politics and their relations. But the point is, again, fundamentally technical. For Badiou, every world must be considered infinite, but its infinity is 'inaccessible', that is, according to the textbook formulation, if the following three conditions hold:

- i. $\alpha > \aleph$;
- ii. for any cardinal $\beta < \alpha$, there is $2^{\beta} < \alpha$;
- iii. the union of less than α ordinals, each less than α , is less than α .

As Badiou notes, this definition operates a kind of 'finitization' of the infinite itself: \aleph_o (aleph-zero) is the smallest infinite cardinal, 'marking the caesura between finite and infinite', and, as such, cannot be approached by operations on any natural number; an inaccessible cardinal larger than \aleph_o would therefore be really pretty big....nor is it any surprise that the existence of such a cardinal cannot be proven. The inaccessible infinity of a world is absolutely inaccessible from within the world itself, and 'any "world" that pretended to less would not be a world' (353). Second, 'this impossibility is what ensures that a world is closed, without for all that...being representable as a Whole' (326). Now, this ontological closure also ensures logical completeness; it is also the case that any relation in the world must be universally exposed, objectively available.

It is with Book V 'The four forms of change' that the demonstration returns to Badi-

^{28.} For 'the non-being of existence means that it is otherwise than according to its being that being is. It is, precisely, the being of an object. The object exhausts the dialectic of being and existence, which is also that of being and appearing or being-there, or finally that of extensive or mathematical multiplicity and intensive or logical multiplicity', LOW, p. 316. Note that 'relation' is here given a particular sense by Badiou, that may signal a gap between the mathematical and philosophical notions of 'relation'.

ou's more familiar terminology (multiples, sets, sites, events, etc.). But it is a reconfigured account of the site and event that we are given here. For Badiou,

The ontology of a site thus allows itself to be described by three properties:

- 1. a site is a reflexive multiplicity, that belongs to itself and thereby transgresses the laws of being.
- 2. A site is the instantaneous revelation of the void that haunts multiplicities, by its transient cancellation of the gap between being and being-there.
- 3. A site is an ontological figure of the instant: it appears only to disappear (389).

BE organized an entirely different disposition of the site/event couple: the site, not being a proper subset of the situation (or world), was 'the *minimal* effect of structure which can be conceived' (BE 173) and provided the condition of being for the event; the event was considered a vanishing apparition composed simultaneously of elements from the site and itself. Now, we have something like certain predicates of the site merged into certain predicates of the event, and a new hierarchy of possible changes. Once again, against the minimality of BE (event v. no event; change v. no change), we have a larger array of possibilities:

- i. A *modification* is the basic form of change as usual, without requiring a site or any transcendental modification of the world;
- ii. 'A fact is a site whose intensity of existence isn't maximal';
- iii. 'A singularity is a site whose intensity of existence is maximal' (393).

This is further complicated by a division *within* singularity. There we find 'weak' singularities (without maximal consequences) or what is now denominated the 'event' proper (a singularity with maximal consequences for the world). In short: at the level of *becoming*, we can have no real change (modification) or real change (site); at the level of *existence*, we can have a non-maximal existence (a fact) or a maximal existence (a singularity); at the level of *consequence*, we have a weak singularity or an event (see diagram on 395; or more technical extension on 417).²⁹

The key concept in the case of the event proper turns out to be what Badiou calls 'the inexistent'. Inexistence is a concept which comes up rather quickly in LOW, in II.1.1, to do with the 'Inexistence of the Whole' (119-121) and in II.1.3, where the subtitle says it all: 'Inexistence of the Whole: to affirm the existence of a set of all sets is intrinsically contradictory' (165-167). But 'the inexistent' of an object is first properly dealt with in a conceptual and formal manner in IV.1.6 (338-341), then again in IV.3.4 (360-362). Its first formulation is as follows: 'we will call "the proper inexistent of an object" an element of the sub-jacent multiples whose existence value is minimal (339). Badiou continues:

Given an object in a world, there exists a unique element of this object that inexists

^{29. &#}x27;The four forms of change are formally defined on the basis of three criteria: inexistence or not of a site, force or weakness of singularity, the pickup [relève] or non-pickup of the inexistent. An ontological criterion, an existential criterion, and a criterion relative to consequences', p. 416.

in this world. It is this element that we call the proper inexistent of the object. It proves, in the sphere of appearance, the contingency of being-there. In this sense, its (ontological) being has (logical) non-being as being-there (341).

The 'inexistent' is thus a dissimulating avatar in LOW of BE's 'void' (or empty set); or, at least, it is a distant relative. So it is no surprise that, just as in BE, an 'event' is integrally linked to the reemergence of the void that has been foreclosed from the situation or, in this new conceptual framework, to the uprising of the inexistent: 'An event has for maximally true consequence of its (maximal) intensity of existence, the existent of the inexistent' (398).³⁰ This returns us to a pre-BE doctrine, efficiently summarized by a Heiner Müller phrase: 'for something to come, something has to go'. Death—which had in BE been purged altogether from the regime of being—is back on the agenda in LOW at the level of appearing and, of course, disappearing. As Badiou puts it here, 'the opening of a space for creation requires destruction' (418).

This primes us for the final two books of LOW, Book VI, 'The theory of points', and Book VII, 'What is a body?' These books return us, in a different vocabulary, to some key moments in BE. The 'point' is now how Badiou rethinks the production of a truth from the point of view of the subject: 'A faithful subject is the form of a body whose organs treat a worldly situation "point by point" (421). Whereas in BE the notion of forcing, of inquiries on the generic set, was employed to give a well-founded rational account of the process of a truth, in LOW this is given through the treatment of points. A 'point' is something that confronts the subject with a binary choice. There are only two possibilities on which to decide, and one cannot not decide (contrast this with BE on the doctrine of the intervention on the event, e.g., the meditation on Pascal, BE 212-222). To choose one is to continue in the truth; to choose the other is to abandon the truth, if not to decide for disaster: 'there is a "point" when, through an operation that implies a subject and a body, the totality of the world is the stake of a coin-toss' (422). Hence a decision upon which the world depends, the 'reduction to the Two of infinite multiplicity' (423). The examples are, as elsewhere in LOW, rather diverse: key decisions in Sartre's plays, the city of Brasilia, Kierkegaard, among others. For Badiou, a subject treats points in a world, point by point, and must, as the advertizing campaign for a popular battery has it, 'keep on keeping on', despite all the difficulties. Badiou has never resiled from martial examples: 'a battle...can be abstractly defined as a point of war' (431-2). Life, as the Emperor Marcus Aurelius put it in his diaries, is war; a war, Badiou might add, of immortals. You can't drop a point, as if it were neither here nor there. It's immortality or nothing.

So the 'body' in which Badiou is interested in giving the concept of is a very peculiar body, a purified, new, immortal body of truth: 'Point by point, a body reorganizes itself, making more and more singular consequences appear in the world, which subjectively weave a truth of which one could say that it eternalizes the present of the present' (525).

^{30.} Formally: 'Given an object (A, Id), we call event the apparition/disappearance of the site A from the moment that this site is a singularity, whether EA=M, which really affects the proper inexistent of the object, or $(EA \Rightarrow E \varnothing_g)=M$, LOW, p. 416.

I would like to underline here the term 'reorganize', as it has connotations important to Badiou: of novelty (it is a *new* body that is being produced); of metamorphosis (the novelty is *real*); of discipline (it is an *organization*, not simply a disorganization that is at stake). In line with his injunctions that a truth-body can therefore be neither individual nor communitarian, we could pun that 'nobody, newbody'. It's a materialist resurrection. But *la vita nuova* isn't always *la dolce vita*. You have to struggle for it. And since we're on this renaissance line of allusion, let's continue down the line. *Alea rejacta est*: having crossed the Rubicon of mathematics once, Badiou has had to cast the dice of BE again in order to head for the Capitol of logic, object and relation.

IV. BE→LOW

Why, then, given its incredible range, clarity and import, can LOW feel unsatisfactory? There is a clue in one of Badiou's own admissions. In V.3.1, under the heading 'Variations in the status of formal expositions', he notes that the Grand Logic adumbrated in books II, III and IV derives directly from category theory, and that 'all this permitted the doubling of the conceptual exposition by a formal exposition supported by its concepts, and homogeneous with certain strata of deductive mathematics' (411). Yet 'it wasn't so in book I, where the formalizations of the concept of the subject were, if one can say so, *sui generis*'. Then, he continues, 'In the present book, as in books VI and VII, we have a situation intermediary between book I (stripped of para-mathematical apparatus) and the three books of the Grand Logic (homogenous with entire strata of this apparatus)' (411-412). This third variation constitutes a formal exposition that, although not deductive, seeks to flay, by means of its sharply 'uninterpretable' literality, the flesh of sense in order to expose the bones of truth.

It's clear that Badiou knows what he's doing. But that's just it: his self-knowledge forces him to present this triple variation, and it is this variation that frustrates and provokes throughout. Badiou knows it too: one finds such apologia scattered throughout LOW. In the 'Technical Note' that concludes the Preface, Badiou writes: 'From Book II, each movement of thought is presented in two different ways: conceptual (which means without any formalism, and with, each time, examples) and formal (with symbols, and if necessary, schemas and calculations). Objective phenomenology and written transpacency' (50).³¹ I do not believe this gap is so easily presented as a benefit; indeed, it is quite not for Badiou himself, given the symptomatic proliferation of apologia.³²

In BE, as I have said, we have the most rigorous minimalism. BE asks, in the most direct and rational fashion possible: what is the minimal situation of being, what are its

^{31.} For example, 'The systematic meditations of BE are followed here by an interlacing of examples and calculations that directly stage the consistent complexity of worlds. The latter, in fact, infinitely diversified figures of being-there, absorb in a transcendental frame, whose operations are invariant, the infinite nuances of qualititative intensities' LOW, pp. 47-8.

^{32.} Yet another example: in the introduction to Book III, Badiou notes, 'It's clear that, by reason of the extreme rigour of enchainments, the formal exposition is here often more illuminating than the phenomenological didactics that precede it", p. 209.

elements, and what are the operations that can be performed upon them? This makes BE a foundational work, in the triple sense that: it takes foundations as its object (being qua the void, the Two, the undecidable, infinity, etc.); that it does this in a foundational way (according to mathematical reason, supplemented by poetic reason); and it thereby itself becomes foundational (an act of philosophical foundation). By contrast, LOW no longer treats of foundational ontology, but of transmundane variations of localization; it is no longer simply foundational, but aims to be more fully descriptive of what transpires: 'one can only fully account for these nuances of appearing through the mediation of examples drawn from varied worlds, and for the invariance of transcendental operations through the confrontation between the coherence of these examples and the transparency of forms' (47-48). Yet the persuasiveness of descriptions varies radically in this book: the early account of the painted horses is miserably deficient compared to that of Hubert Robert's painting in Book III.

This isn't a failure of style, far from it. On the contrary, Badiou is a master of the pedagogical announcement, the clarified definition, the ordered progression, the directive heading, the illuminating instance and the recapitulative slogan. I am constantly struck by the demonstrative rigour of what may initially seem to be only loose discursive gestures, but which turn out to be highly structured and carefully-placed. The examples given in LOW's preface are, for example, clearly preliminary, intended only to give intimations of claims that will be justified later. They thus provide a general rhetorical orientation. They cannot be taken as serious fodder for refutation, precisely because they serve such a clearly pedagogical function; moreover, their very variety is directed towards exposing the hard formal kernel that stabilizes their profusion.

Still, Badiou's demonstrations in BE were so clear and precise, so concerned to ensure the reader's understanding of extremely difficult formal materials (just as Descartes taught his manservant mathematics and wrote in the vernacular so even women might understand), that they never felt excessive or overwhelming. This is not always the case in LOW, where an enormous amount of formalism is deployed—with a much higher symbol-to-page ratio than in BE—but not always with the same clarity, nor to the same effect. One can see the unavoidability of this state of affairs. After all, in the light of LOW, BE is focussed on the elaboration of one world alone, the classical world of ontology, in which non-contradiction and excluded middle reign supreme over their binary empire like Ferdinand and Isabella over an expansionist Spain. But LOW is concerned to speak of *worlds*, of the heterogeneity of worlds (classical, intuitionist and para-consistent), and this entails much broader logical developments. The algebra is uncircumventable, and, if one cannot follow it, one cannot seriously intervene in the descriptions.

For a number of reasons, category theory is more difficult than set theory. First, there is simply the time-lag: set theory essentially dates from the end of the 19th century; category theory arises post-WWII. This temporal fact means that we've all just had more time to deal with the impact of set theory and its infinite infinities. But there's more to it than that. Category theory is, undoubtedly part of our transition to 'post-modernity' (whatever that means); it is not the accomplice of Mallarmé, Lenin and Freud, but

accompanies Celan, Mao and Lacan. There is a certain difficulty, intensity and obscurity to this new world. Moreover, much of the philosophy of the 20th century has been directly inspired by and engaged with set theory in one way or another, from Bertrand Russell through Ludwig Wittgenstein to Michael Dummett. To do philosophy today is already to have encountered, even if indirectly, a set theory that has integrally shaped and been shaped by philosophy. This has not yet been the case for category theory, at least not in such a thoroughgoing and foundational way. Finally, as Badiou himself has remarked, a crucial difference between mathematics and logic emerges here. Set theory is essential mathematics: one can, at a pinch, understand the mathematical concepts, without having to follow the formal calculations (e.g., the innumerable accounts of Russell's Paradox endemic to first-year philosophy courses). This doesn't mean one doesn't have to do the maths. Category theory, on the other hand, bears the essential hallmarks of formal logic (albeit mathematized): as the very name suggests, one cannot quite get it unless one submits to and goes through the formal definitions and procedures step by step.33 As Badiou says, 'logic is definitional, whereas real mathematics is axiomatic' (TO 119).

Rather, the problem is not so much a problem of style as of substance. That is, anyone who wishes to read LOW properly is going to have to follow the logic. One hopes—without any real faith—that this fact will prevent commentators from trying to dismiss Badiou's use of logic and mathematics as if these were simply rhetorical add-ons, merely smart-arse ways of presenting a message that could just as well have been presented in common language without the use of all those symbols. To date, such a position remains the most obscurantist response to Badiou's work. One can regularly read critics (both 'for' and 'against' Badiou) who seem to think, if they do not declare it directly: 'oh, the mathematics isn't really important, we can go straight to the doctrines and treat them as if they were like any other philosophical utterances'. One can at least see why people are tempted to defend such a deleterious error, given they have been lucky enough to understand something thanks to the outstanding clarity of Badiou's conceptual re-presentations. Though it might be going too far to say something like 'you don't have to be a poet, mathematician, militant or lover to understand something about the thoughts they think, but you can't really get anything about the logic unless you submit to the algebra',

^{33.} Badiou specifies: 'The mathematics of being as such consists in forcing a consistency, in such a way that inconsistency is exposed to thought. The mathematics of appearing consists in disclosing, beneath the qualitative disorder of worlds, the logic that holds differences of existence and intensities together. This time, it is a question of exposing consistency. The result is a style of formalization at once more geometrical and more calculative, taken to the edge of a topology of localizations and an algebra of forms of order. Whereas ontological formalization is more conceptual and axiomatic: it examines and unfolds decisions of thought of a very general import', LOW, p. 48.

^{34.} If you will forgive the execrable taste involved in self-citation, please refer on this point to my 'Doubles of Nothing: The Problem of Binding Truth to Being in the Work of Alain Badiou', *Filozofski vestnik*, vol. XXVI, no. 2, 2005, pp. 97-111. For a stringent critique of Badiou's mathematics—one of the very few that I have seen that goes about such a critique in an acceptable way, see R. Grigg, 'Lacan and Badiou: Logic of the *Pas-Tout*', in the same edition, pp. 53-65.

it's still tempting to do so—on the basis of the experience of reading LOW.

This is a consequence of Badiou's unrelenting pedagogical efforts. From maxims to tables, from exegesis to argument, Badiou could not present his philosophy more clearly or rigorously. In LOW, he introduces each book with a summary of what is to come; he speaks of his method and its justification in ordinary language; he elucidates the technical elements of logic with an extraordinary care, and so on. His inclusion of scattered scholia and appendices, of a list of the book's 66 major statements, of a 'dictionary of concepts', of an index, is testimony to his desire not to obscure anything. The 'Renseignements' are of real interest, supplying unfailingly accessible yet incisive remarks about Badiou's references and trajectory, his antecedents and colleagues, his friends and his enemies (including a note on a genuinely hilarious compact with Slavoj Žižek, as well as allusions to two stunning formal interventions by Guillaume Destivère). Yet a certain obscurity still emerges in the gap between demonstration and conviction, between deduction and rhetoric, in the very variability of the presentation. It is precisely because Badiou must have recourse here to so many examples that his propos seems to waver. The radically inventive nature of LOW, which effects an almost violent technical resignification of a wide range of terms (logic, appearing, transcendental, object, relation, envelope, reverse, maximal, etc.), is strained by the very tirelessness with which Badiou surrounds the formal expositions with intuitive sketches. Yet, as Badiou repeats throughout, the descriptions are nothing without the logic and mathematics; it is the logic that must bring out the consistency binding the incoherent slew of appearances.

To put this another way, the problem is that the transliteral operations of BE, which sutured set-theoretical mathematics and meta-ontological propositions without mediation, are shown to be highly *localized* operations, good for one particular classical world but not, by definition, necessarily for any other kind. In the very attempt to specify a theory of appearing that is consistent with the theory of being in BE, Badiou needs to find *new* operators between philosophy and logic that will ensure the gap between them is not, once again, subjected to the ruses of mediation. This necessity provokes certain questions that I am not sure have yet been adequately answered by Badiou. To give some very simple examples: is the revised theory of the event-site given in LOW a more 'general' theory, one which leaves the account given in BE correct, but only for the ('special', 'restricted') ontological situation? Or is LOW correcting the theory of BE *tout court*? Or is LOW simply giving the theory of how event-sites function in appearing, saying nothing about how they function in being? This is, of course, the return of the problem of the sequel; or, for reasons I will shortly expand upon, of *resurrection*.

V. KANT OR HEGEL?

As Friedrich Nietzsche pointed out, not the least charm of certain theories is that they can be refuted; everyone believes him- or herself strong enough for the job. So mediocrity survives, slipping unrepentantly from era to era like Rameau's Nephew in search of a few small positions and a couple of coins. Certainly, many works sometimes

survive, not because of their refutability, but because of their irrefutability. And yet is it not always irrefutability that forces opponents to discover or invent entirely new ways to circumvent great philosophical interventions. It is something indifferent to the distinction 'refutable' and 'irrefutable'. Thus Kant's division between noumenal and phenomenal realms, his circumscription of the heterogeneous operations of thought, his elaboration of networks of categories and conditions to articulate this heterogeneity, etc., forced Fichte, Hegel and Schelling to unprecedented efforts in philosophy. If one can certainly argue with Kant on his own grounds, his establishment of these grounds completely reconfigures the previous terms of philosophical discussion in such a way that hitherto central problems come to look like false problems or, even when on the right track, are superseded by the Kantian presentation. Even then, if one later 'out-Kants' Kant himself, he has, as I have said, forced such an operation, and has done so in such a way as to ensure what we might call the impossibility of his own obsolescence. He may be out of date. He may be wrong. His ontology may have been superseded by independent developments. Yet he cannot be circumvented. We are back to the problem of the absolute.

Of all the philosophers (and anti-philosophers) to whom Badiou dedicates little sections of LOW—including Deleuze, Kierkegaard, Lacan and Leibniz—the two most important are undoubtedly Kant and Hegel (it is illuminating to refer to the index to see who gets the most references). As we know, this is not an idle coupling. If Badiou certainly tries to treat them independently in his discussions, this is not altogether possible. Kant and Hegel have effectively set the terms of post-Romantic philosophy to the present. The problem in this context is precisely the problem of the logics of worlds: does Badiou offer a way in LOW to circumvent the stringent division inflicted on being by Kant, without simply sewing it up again, à la Hegel? Let's examine this question by a kind of indirect comparison.

First, Kant. If Badiou dedicates an entire section of this book to an interpretation of Kant (III.2), he notes in his 'Renseignements' that 'Kant is exemplarily the author with whom I have not managed to become familiar. Everything about him irritates me, and first of all the legalism—always asking *Quid juris*? or 'Haven't you crossed the limit?'—combined, as in the United States today, with a religiosity all the more disturbing for being at once omnipresent and vague' (561). For Badiou, then, just as for Deleuze (not to mention Nietzsche), Kant is a rather unprepossessing figure. Yet Badiou will also accord Kant a 'shadowy grandeur' and, following Lacan, a 'philosophical sadism'.

This ambivalence shouldn't hide the fact that Kant is perhaps the real interlocutor throughout LOW, precisely because, in addition to his setting of the terms that still regulate contemporary philosophy, he is the philosopher who first broached the problems of appearing and of subtractive ontology: 'Kant is undoubtedly the creator in philosophy of the notion of object' (244). Moreover, Kant's creation is rigorous and precise: 'The subtractive rationality of Kantian ontology ends up placing the relation between an empty logical subject and an object that is nothing at the foundation of representation' (TO, 138). Moreover:

What is common to Plato, to Kant and to my own attempt, is to state that the rational grasp of differences in being-there, or intra-mundane differences, is not deducible from the ontological identity of the existents concerned, because this identity tells us nothing of the localization of the existent (132).

Nonetheless, the Spider of Königsberg never arrived at Badiou's own 'ontico-transcendental synthesis' of the gap between 'the pure presentation of being in the mathematics of multiplicities on the one hand, and the logic of identity that prescribes the consistency of a world on the other' (239). And yet, and yet....

Against this ambivalent relation to Kant, we can array Badiou's altogether less troubled relation to Hegel: 'To my eyes in fact, there are only three crucial philosophers: Plato, Descartes, Hegel' (552). In fact, the identification with Hegel is so strong that Badiou will even declare: 'Logics of Worlds is to Being and Event what Hegel's Phenomenology of Spirit is to his Science of Logic, although the chronological orders are reversed: an immanent grasp of the givens of being-there, a local traversal of figures of the true and the subject, and not a deductive analytic of forms of being' (16). A little later, Badiou will displace this comparison again: 'The "historic" companion to the present book is Hegel, thinker par excellence of the dialectical correlation between being and being-there, between essence and existence. It is against his Science of Logic that we measure ourself here' (110). It's Hegel over Kant, any day.

So Badiou's identification is overwhelmingly with Hegel. But in many ways his intervention is far more Kantian than Hegelian. Like Kant, Badiou's most striking philosophical achievements have come relatively late in his career. This is not simply a biographical detail; after all, 'age' and 'generation' are integral to the disposition of philosophy (think, for example, of the relation between Plato and Socrates, or the Romantic exaltation of the figure of 'the child'). BE was only published in 1988, after a long succession of extraordinary works, such as TS (1982), which remixed philosophy, psychoanalysis, political theory, and poetry in very odd ways. But TS is, in my opinion, a philosophical failure. It's not that it's not a brilliant book. Its ambition, inventiveness, local apercus, and range of reference are staggering (if still restricted in comparison to BE and LOW).

The point is that a book can be brilliant without being a genuine work of philosophy. Indeed, one of the things that makes philosophy unique is that is it sometimes even permitted to be ignorant and stupid. Badiou's oft-stated appreciation of TS has a merely personal flavour to it; the book does not necessarily deserve such approbation in itself, at least not as philosophy. So the question of the generation of BE must, like the first *Critique*, entail a kind of *maturation*, that is, a leap and a rupture that is not merely a supersession. Such 'maturation'—I give it this obscene name in honour of Kant's own definition of Enlightenment as an exit from a self-imposed immaturity—must further recognize itself as a leap and a rupture, at the very moment that it retains within itself a trace of the confusions of infancy from which it emerged.³⁵

^{35.} In fact, disciples are often reactionary or obscurantist in the guise of fidelity. If you believe that such propositions as 'Badiou has always been interested in mathematics' or 'the key to Badiou's thought through-

It is undoubtedly also significant that Kant, having seized the work of his maturity, starts to produce sequels: *Critiques* 1, 2, and 3 (Pure Reason, Practical Reason, and Judgement). For this maturation also involves an act of radical self-restriction. Like Kant's great *Critiques*, Badiou's BE period works exhibit a certain *asceticism*. This asceticism is both enacted and thematized in the restrained selection of targets, the style of writing, not to mention the concepts themselves. It's no accident that one of Badiou's favourite slogans becomes the Mallarméan one of 'restrained action'. No less than the problem of maturity, the problem of asceticism is entirely immanent to the philosophical text.

Like Kant—but unlike Hegel—Badiou radically denies the existence of the Whole, the All. Kant is in fact so radically opposed to such totality that he refuses to vitiate the rift between phenomenal and noumenal. At best, for Kant the idea of 'totality' must remain purely regulative. If there is 'some of the One', it's subordinated to its inexistence, to irrecuperable division. For his part Badiou, mounts one argument after another against the One. In both LOW and BE, he provides nifty demonstrations derived from Russell. What this inexistence of the Whole in fact entails is a division of being and being-there. As Badiou himself says, Kant is the beginning of subtractive ontology: 'For the first time really, Kant was the one to shed light on the avenues of a subtractive ontology, far from any negative theology' (TO 139).³⁶ To the extent that the Hegelian Absolute is given any truck, it is as a foil for the true state of affairs: 'Like the Hegelian Absolute, a world is the unfolding of its own infinity. But, in contrast to that Absolute, it cannot construct in

out is the dialectic' norm BE's emphasis on conditions, then you are a reactionary. BE is thereby figured simply an extension of a pre-existing situation, one in which the attempt to think the materialist dialectic is king. The equation mathematics = ontology is thus submitted to the dictates of an alleged Ancien Régime; on such a vision, BE did not mark any real rupture at all. This view is tantamount to believing BE is an adjustment to sustain a larger, ongoing program. It reduces BE to an extension of categories that 'were present from the start', but without—the key point—acknowledging that they have been totally 'recast', OB, p. 15. Certainly, as Ray Brassier writes, 'Throughout Badiou's work, mathematics enjoys a privileged status as paradigm of science and of "scientificity" in general. This has been a constant, from his first significant philosophical intervention, the 1966 article 'The (Re)Commencement of Dialectical Materialism', notable for the way in which it already prefigures his subsequent (career-spanning) preoccupation with the relation between set-theory and category-theory, to his most recent work, wherein Badiou finally establishes a philosophical connection between these two branches of mathematics by arguing that the doctrine of being, laid out via set-theory in Being and Event (1988), needs to be supplemented by a doctrine of appearance that mobilizes category-theory, as Badiou does in his forthcoming Logics of Worlds', 'Badiou's Materialist Epistemology of Mathematics', Angelaki, vol. 10, no. 2, 2005, pp. 135-150. All this is absolutely true; but it would be false if one believes that this fact bears in any serious way upon the breach effected by BE: before BE, Badiou (as he himself admits) was completely unable to give, in all its power and clarity, the unprecedented equation mathematics = ontology, and push it into the real. Brassier himself is certainly not proposing that such a continuity trumps the breach, though others are....

36. On the necessity of *division*: 'Plato must separate himself from Parmenides and identify thought otherwise than by its pure coextension to being. Descartes, by hyperbolic doubt, Husserl by the transcendental epoché, separate immanent reflexion from every position of the object. Kant, all at once, distinguishes thought (element in which transcendental philosophy proceeds) from knowledge (which determines particular objects). For my part, I distinguish speculative meta-ontology from mathematical ontology, and mathematical ontology from the logic of appearing. But, more essentially, I also distinguish thought (subjective figure of truths) and knowledge (predicative organization of truth effects)', LOW, p. 253.

interiority the measure, or the concept, of the infinity that it is' (326).

Finally, like Kant, Badiou insists that philosophy is entirely *conditional*. For both philosophers, integral to the work of philosophy is the affirmation of the very conditions it depends upon; moreover, they both insist upon the conditions' irreducible separation from one another, as well as their irreducible exteriority to philosophy. What else is the 'conflict of the faculties' in Kant? What else is the 'peace of the discontinuous' in Badiou? The conditions are self-supporting in the peculiar way that I spoke about above (e.g., their verification is intrinsic to their practice). Philosophy, by contrast, is not self-supporting, being entirely reliant on these conditions. This is why so much of Kant's text is dedicated to what seems to be an elaborate police operation: yet what is really at stake, as in the famous image of the dove, is that, unlike the bird itself, philosophical flight cannot ignore the resisting air which renders it possible. And this is why so many of Badiou's headings have to do with 'metaontology', 'metapolitics', and 'inaesthetics': the 'ins' and 'metas' are neither an index of superiority nor of negation, but the philosophical stigmata of *being conditioned*.³⁷

Maturation, asceticism, division, condition: Kant and Badiou, certainly radically different in so many ways, are nonetheless aligned according to these fundamental operators. So Badiou's clear and conscious identification with Hegel not only falsifies his far more profound affiliations with Kant—but tempts him in LOW to vitiate some of the rigour of BE (LOW reads very much more like TS than like anything else Badiou has written post-1988; that is, a philosophical *omnivorum*, a gargantuan rattle-bag of interesting phenomena and brilliant aperçus).³⁸ What are the problems that Badiou's total curiosity, not to mention his avowed identification with Hegel, and his disavowed identification with Kant, get him into?

Here are three problems that I see as deriving directly from the Kant-Hegel imbroglio: 1) the materialist dialectic; 2) the temptation of the whole; 3) the theory of change. These problems are all linked. Symptomatically, one can see the return of triads throughout LOW. For example, the dialectic of presentation of the logic of the concept of body proceeds like this: 'our trajectory can be summarized thus: subjective formalism (without object); object (without subject); objectivity of the subject (bodies)' (205). Then are the three forms of the subject (faithful, reactive, obscure), the three fundamental operators of objectivity (localization, compatibility, order), the three themes of the Grand Logic (transcendental, object, relation) and so on. When you start dealing with Triads, one bad guy is still the big boss, and that's Hegel. Even if you add a fourth strut to each, that is, as Zizek has often noted, Hegelian too.

^{37. &#}x27;The words "inaesthetic," "transitional ontology," "metapolitics" are coined against "aesthetics," "epistemology" and "political philosophy" respectively in order to indicate the twisted relation of the condition/evaluation pairing, and, if possible, in order to deny oneself the temptation to rely on the reflection/object relation, Alain Badiou, 'Preface to the English Edition', *Metapolitics*, trans. J. Barker, London, Verso, 2005, p. xxxiii.

^{38.} As A. J. Bartlett has suggested to me, LOW might even be better considered a *prequel* rather than a *sequel* to BE, given the number and intensity of LOW's links to TS (private communication).

For Badiou, because there is no One, nothing binds the inconsistency of worlds. The problem is: how is it that, given the patency of incommensurables, a truth can be said to be 'the same'? This is also the problem of time. For Badiou, a truth-procedure must aim at the 'present', a present that is such only as a 'future anterior', and is, thereby, 'immortal' (or 'eternal'). The two issues are linked. Take the little demonstration on prime numbers (18-25). Here Badiou reiterates:

Must it be deduced that all is culture, including mathematics? That universality is only a fiction? And perhaps an imperialist, even totalitarian, fiction? From the same example we will, completely to the contrary, affirm:

• that an eternal truth is enveloped in different linguistic and conceptual contexts (in what we will call, on the basis of Book II, different 'worlds');

• that a subject of the same type finds itself implicated in the demonstrative procedure, whether it be Greek or contemporary (whether it belongs to the world 'Greek mathematics' or to the world 'mathematics after Cantor')

The key point is that the truth subjacent to the infinity of prime numbers is not so much this infinity itself as what is deciphered there regarding the structure of numbers: that they are all composed of prime numbers, which are like the 'atomic' constituents—indecomposable—of numericity (20-21).

This can only work if one takes mathematics to be one world, love another world, politics another, art yet another—and that these 'worlds' are not the 'worlds' we think of when we think 'Greek theatre' or 'modernist theatre'. Against relativism ('democratic materialism'), Badiou has then, on the one hand, to affirm eternal truths; on the other hand, there is no totality, so worlds are really disjunct. The difficulty is then to explain how eternality can emerge from within a world, and how this eternality then communicates between worlds: 'I believe in eternal truths and in their fragmented creation in the present of worlds. My position on this point is completely isomorphic to that of Descartes: truths are eternal because they have been created, and not because they have been there forever' (534). But this is to restate the problem in the guise of a conviction, supported, moreover, by an appeal to authority.

Part of the difficulty is that it isn't simply that a theory of change is lacking; it's nice to have a more elaborate theory of world-transformation, sure, but such a theory only forces out the problem more clearly. I was impressed with the account given in BE, as I am impressed with the different account of change (and the possibility of change) in LOW.³⁹ But perhaps it isn't enough. It's that a really convincing concept of eternity is

^{39.} As Oliver Feltham notes, BE 'can privide a theory of both the multiplicity of structures and contingent astructural change. What Badiou's philosophy adds is basically: 1) The contingency of structural incompleteness or instability: not every structure permits global change. 2) The possibility of anomalous events that occur in the register of the real, outside structure (they are not grounded in any external reality/context), and which can initiate change if there are. 3) The elaboration of structural preconditions for transformation—someone recognizes and names the event as belonging to the situation...Finally, 4) A new way of thinking subjects of change, subjects who, over time, participate in the invention of a new symbolic order by means of hypotheses and enquiries concerning the belonging of the anomalous event to a structure, 'Enjoy your stay: Structural Change in Seminar XVII, in J. Clemens and R. Grigg (eds.), Jacques Lacan and the Other

lacking. It seems to me the kernel of the problem is this: how to seize and present the historicity of the eternity of contingency, the fact that eternity emerges in worlds in time. Kant wouldn't see the need to do it; Hegel could do it, but because he believed in the Whole. It may well be a trap to think that a 'materialist dialectic', an account of 'specificity' routed through category theory, or a better typology of subjective variations is going to help with this deadlock. On the contrary, we have so much trouble thinking contingency precisely because of the ineluctability of the dialectic.

A *resurrected* truth—whether that of prime numbers or the depiction of horses—must leap the gap between heterogeneous worlds, but a truth can only be the truth of *a* world. It is this 'sequelization' of truth that I have not yet understood in LOW.

VI. CONCLUSION

It may not be enough to pair the rigorous formal demonstrations with quasi-phenomenological talk of battles and demonstrations and paintings. But only time will tell: I have never read anything quite like LOW before, and, given that it was officially published barely a half-year ago (March 2006), I have been unable to find any substantial responses to it. None of the existing accounts have given the slightest evidence that they have so far dealt adequately with the formal logic, let alone with the real ambitions of the book. Indeed, LOW will probably prove to be among the most ambitious and wideranging works of philosophy of the 21st century. Who else in contemporary philosophy anywhere in the world shares Badiou's range and depth of knowledge (mathematics, logic, philosophy, great moments in politics, key developments in contemporary music, the history of theatre, etc.), let alone the ability to articulate these knowledges in such an unprecedented fashion?

Still, I cannot see what's at stake in affirming a 'materialist dialectic' today against 'democratic materialism'. These are terms from the struggles of a previous era, one that still held out hope for the Whole, even in its negation or loss (e.g., 'the Whole is the untrue, 'the end of metanarratives,' 'anti-dialectics,' etc.). Nothing intrinsic justifies this as a 'materialism' (why not just call it a 'realism'?), other than old fondnesses. Idealism, materialism: this has become a distinction without difference in a world where foundational physics invents incommensurable and untestable string-theories that are nonetheless each consistent; where the legacy of political activism engages local struggles that hardly require any kind of doctrine or praxis of 'materialism' for their organization or effects. What's in this 'dialectic' today that's worth saving? What's in this 'materialism' that's not a mere slogan? LOW is certainly BE2, a genuine sequel in the sense of which I spoke above. But it is in some fashion also a recoiling, a kind of return to the good old days of Badiou's pre-BE struggles. So I think the guiding opposition that opens this book, between 'democratic materialism' and 'materialist dialectics' is misleading. The challenge is rather to surpass democracy, materialism and dialectics, without succumbing to fascism, idealism and lassitude. The slogan one might brandish instead is transliteral absolutism.

I think this is what one should ask of philosophy: to identify, to announce, to harbour, to affirm, to practice the (or an) *absolute*. A philosophy can certainly domicile regional theories within it; but it is itself not simply a theory, or agglutination of theories. Nor can philosophy be reduced to a quasi-Wittgensteinian 'dissolution of false problems', though dissolution can certainly sometimes in itself provide some kind of absolute. But the point is that true philosophy may require no theory at all. Just an absolute. An absolute, moreover, that can even be evanescent, infirm, indiscernible.

This is what an attention to the conditions of philosophy enabled Badiou to do in BE. Badiou's undoubted personal genius—evident from *Le Concept de modèle* to *Peut-on penser la politique?*—was curbed by conditions to produce the terrible beauty of BE. There, there is no real rhetoric at all, as he is reduced to presenting the foundational interventions of other discourses, mathematics and poetry above all. BE's philosophical power derives from its Platonic attention to the incommensurable absolutes and their articulation, which had to be done in a non-dialectical fashion. BE is very explicit on this point: it is not logical negation, contradiction, antagonism, or other familiar philosophemes that are up to the mathematical thought of the foreclosure of the inconsistency of the void. It's set theory, and set theory alone. Moreover, it's not just that Badiou's philosophical ambitions can only be fulfilled by being brutally curbed; rather, everyone's ambitions are curbed as they are delivered into their secular eternity. Plato is an absolute, but, coming before Cantor, must fail to think being as infinity, having to take recourse to the figure of a dream; Rousseau is an absolute, who, despite his anti-philosophical tendencies, forges an eternal distinction between the totality of wills and the general will.

All this can be done precisely because, in the terms that LOW offers, BE largely restricts itself to a world, to a single world, the world of ontology (and to its fracturing through events). LOW, however, is about the logics (irreducibly plural) of worlds (also plural). It thus sets itself a task so grand that self-comparisons to Hegel aren't going to cut it: in the last instance, LOW provides neither the unbearable ontological intrication of the Science of Logic, nor the hallucinatory cavalcade of the Phenomenology of Spirit. Why? Precisely because there is no Whole for Badiou, the worlds can be given no overarching arché, no principle, no absolute reason. What in BE were not examples, in any sense of the word, but conditions, that is, the supports for the philosophical snatch and grab, in LOW turn once more into examples. To read LOW after BE is to read a jumbled work of genius, teeming with inventiveness at all levels. But its genius can also seem tendentious, precisely because its only restraint is to gesture towards possible exemplifications of the logical structure. What has happened to the absolutely central doctrine of such books as BE and C, where philosophy's 'historically invariant' definition involves the construction of a place in which science, love, art and politics can all encounter each other? Is this still the case? In LOW, everything verges on a Borgesian dream, moving, with a delirious energy, from prime numbers to cave paintings of horses to Spartacus to contemporary music to....

So if LOW must be read, its propositions, even when irrefutable, often appear far

from absolute. Nonetheless, it never gives up on what the stakes are today for philosophy. These are, as I suggested above, to attain to a *transliteral absolute* by taking reason to the very points at which it breaks down and is transformed into something unprecedented. To literality, not materiality; to contingency, not sufficiency; to absolution, not dialectics; to submission, and not to surrender.

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