

# The Idea of the Generic: The Problem of Form in the Work of Alain Badiou

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# Abstract

Alain Badiou's philosophy is a consequential attempt to make the idea of generic existence intelligible with purely formal means.

The aim of this thesis is to show how Badiou develops a mathematical ontology to think the idea of generic politics after the failure of Maoism and to demonstrate the limits of this approach.

My thesis follows the chronology of Badiou's work, and I distinguish four periods: early work that includes the 'novels' *Almagestes* (1964) and *Portulans* (1967), and the hyper-Althusserian theoretical texts of the mid- to late-1960s; Maoist theory that includes the pamphlets of the 1970s; *Theory of the Subject* (1981); and finally, the Platonism of *Being and Event* (1988) and *Logics of Worlds* (2006).

In chapter 1, I argue that, although Badiou's early novels have barely received any attention in recent reception of his work, they are important to understanding the development of his formalism out of a literary concern with the aesthetic whole and how this can serve as an image of political action. In chapter 2, I focus on Badiou's theory of the late 1960s and reconstruct his axiomatic interpretation of Althusserian theory, the distinctive move of which is the substitution of the mathematical category of set for the notion of object. The argument of chapter 3 is that the logic of anxiety in Badiou's political pamphlets of the 1970s circulates around the reality of communism, and that *Theory of the Subject* is best understood as an attempt to circumvent this through a partial return to mathematical formalism. In chapter 4, I argue that the ontology of *Being and Event* replaces history with a logic of retroaction whose model is set-theoretical forcing and that the supplementary logic of appearance in *Logics of Worlds* is ultimately nothing more than an extension of this mathematical formalism.



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# Abbreviations

A	<i>Almagestes</i>
AAP	‘The Autonomy of the Aesthetic Process’
BE	<i>Being and Event</i>
CH	<i>The Communist Hypothesis</i>
CM	<i>Concept of Model</i>
DI	<i>De l’idéologie</i>
LM	<i>Logics of Worlds</i>
P	<i>Portulans</i>
RDM	‘The (Re)commencement of Dialectical Materialism’
RH	<i>The Rebirth of History</i>
TC	<i>Théorie de la contradiction</i>
TS	<i>Theory of the Subject</i>



# Introduction

The essence of thinking always resides in the power of forms.

—Badiou, *The Century*

The aim of this thesis is to show that Alain Badiou's work fundamentally relies on formalist modes of thinking that both enable and constrain the way he thinks the idea of generic politics after the failure of Maoism at the end of the 1970s.

By formalist I do not merely mean abstraction from the concrete, but the axiomatic orientation of thought such that abstract forms are articulated in the most unequivocal of terms, and are, in principle, intelligible to anyone. Whether in literature, mathematics or politics, this means initially asserting postulates, axioms, or maxims, and manipulating material to produce a unified whole that is consistent with the basic principles. This approach is purest in mathematics, where the 'material' is mathematical symbols, and formalization—the step by step process of drawing out consequences consistent with axioms—results in a literal work whose consistency is impervious to interpretation. Badiou's conception of formalization is broad: in art is it about producing works that are true to universal ideas such as Schoenberg's emancipation of dissonance through the operation of his twelve-tone system; and in politics, formalization is concerned with the discipline of the revolutionary party from Lenin to Mao.

The point of departure for this thesis is the status of form in Badiou's initial engagement with structuralism. In my view, the distinction of form and structure in Badiou's work is essential to understanding his responses to the theoretical and political problems that arise in the development of his thought. Structure is often taken to be the 'skeleton' or invariant network of relations underlying a visible form or shape. Most famously, Lévi-Strauss developed this in his analysis of kinship and myths. Against formalism, which operates at a level removed from the empirical, Lévi-Strauss presumes that structures are immanent to the concrete because culture is best understood in terms of the relations between symbolic beings. The problem is not that structures are abstract, but that they never change, and therefore the fundamental political question addressed to structuralism is how to get out of social structures of inequality in which people find themselves determined. Formalism is complementary to this conception of structuralism because the axiom has the power to authorize a fresh start. An axiom (or 'common notion', as Euclid put it in his *Elements*) is an

undemonstrated proposition whose validity is taken to be beyond doubt.<sup>1</sup> A purely axiomatic approach to politics makes it easy to assert statements of prescriptive principal, but due to the purely abstract nature of such principles, the problem is rather that of how to make them concrete.

From his earliest work, Badiou's distinctive engagement with structuralism was, like Barthes, to emphasize the active aspect of structure, that is, to aim at producing a (re)structuration whose logic is that of a work done rather than that of latent invariance. The distinctive move of his earliest published work in the mid-1960s is to operate the axiom within a broadly Lévi-Straussian conception of structure as myth. By the end of the 1960s, he had gone even further by opposing a formalism of mathematical structure to Lévi-Strauss. In theory, this enabled Badiou to model transformation, however, due to the purely abstract nature of mathematical structure, the relation of this conception of transformation to concrete struggles remained completely obscure. This changed with the advent of May '68, the consequences of which forced Badiou to reorient his thought and privilege concrete revolutionary action and the political subject. After a decade of political engagement in the 1970s and the failure of Maoism, Badiou's focus shifted back to questions of form and structure but with a commitment to the subject. From the early 1980s onwards, he increasingly placed the emphasis on how, against the presumption of an underlying structure to history which produces subjects as effects, mathematical formalism provides resources for thinking the subject in terms of the effect of axiomatic unbinding from structural determinations.

My investigation into notions of structure and form in Badiou's work has led me to the conclusion that from the 1960s to the present, his work is best understood as an increasingly clear engagement with a single notion of form: the Platonic idea.

The Anglophone reception of Badiou's work remains largely focussed on his work from *Being and Event* (1988)<sup>2</sup> onwards, and the field is polarized according to degrees of adherence to Badiou's Platonism. At one extreme, there is A.J. Bartlett's *Badiou and Plato* (2011), which reads Plato's dialogues through the filter of concepts selected from *Being and Event*, claiming to have 'revivified, without corruption, the foundational trajectory'.<sup>3</sup> At the other, Peter Osborne's disparaging view that '*Being*

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<sup>1</sup> Blanché, Robert, *Axiomatics*, trans. by G.B. Keene (London: Routledge, 1966), pp. 9–10.

<sup>2</sup> Badiou, Alain, *L'Être et l'événement* (Paris: Seuil, 1988); trans. by Oliver Feltham as *Being and Event* (London: Continuum, 2007).

<sup>3</sup> Bartlett, A.J., *Badiou and Plato: An Education by Truths* (Edinburgh: Edinburgh University Press, 2015), p. 3.

*and Event* is a work—perhaps *the* great work—of philosophical neo-classicism.’<sup>4</sup> The more productive readings in between have adopted a variety of strategies. Peter Hallward emphasises the need to distinguish the ‘being-mediated’ of the properly specific nature of relations from the purely abstract type developed in Badiou’s Platonism;<sup>5</sup> Paul Livingston frames his discussion of formalism and Badiou’s relation to Wittgenstein with the Aristotelian question ‘in what way does a form *inform* a life?’;<sup>6</sup> similarly, Ed Pluth blurs the distinction of Platonism and Aristotelianism by presuming that Badiou’s theory of the subject is ultimately about the coming together of formalism and vitalism;<sup>7</sup> Miguel de Beistegui views Badiou’s Platonism as a foil for advancing an ontology of difference rather than multiplicity;<sup>8</sup> and for Daniel W. Smith, Deleuze’s ‘immanent’ ontology envelops the ‘transcendent ontology’ of Badiou’s Platonism.<sup>9</sup>

Of particular interest to us here is Bruno Bosteels’ attempt to extract a latent Aristotelianism from Badiou’s work by prioritizing *Theory of the Subject*,<sup>10</sup> Badiou’s most dialectical text, and diminishing the role of mathematics in Badiou’s work as a whole. Like Bosteels, I think the privilege granted to mathematics by Badiou’s philosophy is what constrains his politics, however, unlike Bosteels, I think that mathematics is essential to the majority of Badiou’s philosophy, and I do not think it is possible to sustain Bosteels’ resistance to the mathematical idea whilst remaining within the orbit of Badiou’s thought. With reference to Adorno’s remark about reducing Hegel’s logic to its concrete experiential content, Bosteels proposes reading Badiou’s work such that: ‘Every logical and ontological operation, however formal it may well seem to be, must thus be related against the grain to the experiential core that conditions it.’<sup>11</sup> This seems to wilfully overlook that it is not experience in that sense which is

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<sup>4</sup> Osborne, Peter, ‘Neo-classic: Alain Badiou’s *Being and Event*’, *Radical Philosophy*, 142 (March–April 2007), 19–29 (p. 19).

<sup>5</sup> Hallward, Peter, *Badiou: Subject to Truth* (Minneapolis: University of Minnesota Press, 2003), p. 322.

<sup>6</sup> Livingston, Paul M., *The Politics of Logic: Badiou, Wittgenstein, and the Consequences of Formalism* (London: Routledge, 2012), p. 4.

<sup>7</sup> Pluth, Ed, *Badiou: A Philosophy of the New* (Cambridge: Polity, 2010), p. 4.

<sup>8</sup> Beistegui, Miguel de, ‘The Ontological Dispute: Badiou, Heidegger, and Deleuze’, trans. by Ray Brassier, in *Alain Badiou: Philosophy and Its Conditions*, ed. by Gabriel Riera (Albany: State University of New York Press, 2005), pp. 45–58.

<sup>9</sup> Smith, Daniel W., ‘Badiou and Deleuze on the Ontology of Mathematics’, in *Think Again*, ed. by Peter Hallward (London: Continuum, p. 93.

<sup>10</sup> Badiou, Alain, *Théorie du sujet* (Paris: Seuil, 1982); trans. by Bruno Bosteels as *Theory of the Subject* (London: Continuum, 2009).

<sup>11</sup> Bosteels, Bruno, *Badiou and Politics* (Durham: Duke University Press, 2011), pp. 42–43.

constitutive for Badiou but rather the encounter with the void of experience, and therefore content is form.

In 2005, Badiou clarified his conception of form, which, since the 1960s, had been implicit in his use of the term formalization: ‘in “formalization”, the word “form” is not opposed to “matter” or “content”, but is instead coupled to the real of the act.’<sup>12</sup> Against the broadly Aristotelian approach, in which form refers to the shaping of essence or underlying material (both physical and logical), Badiou’s peculiar Platonism sees form as the purely abstract articulation of being on the basis of axioms.

While in the Aristotelian approach, creativity is the power to continuously transform essence, in Badiou’s Platonic alternative, invention is the power to authorize new and discontinuous modes of thought. This is especially important for Badiou’s conception of politics, which is axiomatic because it holds that justice cannot be defined prior to the affirmation of the formal principle of equality. Axiomatic politics is opposed to political representation of all kinds: what matters is that people directly affirm universal equality and consequently make a true community of equals exist. This debate is bound up with the ancient problem of the priority of the one or the many. For Aristotelians, the one must be primary for there to be continuous essence, while for Platonists, the many must take precedence for thought to be discontinuous.

In an interview in 2007, Badiou elaborated on the centrality of a certain conception of ‘the idea’ to his conception of form: ‘Like Plato, who first thought this, thinking is the thinking of forms, something that he called ideas but they are also called forms. It is the same word, *ἰδέα*.’<sup>13</sup> With Plato, Badiou takes mathematics as paradigmatic of the idea. More precisely still, since the late-1980s, Badiou has defended Cantor’s creation of the mathematical set as the mathematical idea par excellence.

In my reading of Badiou’s work, I take the primary instance of form to be Georg Cantor’s famous designation that a set [*Menge*] is the collecting of a multiple as one. The working definition of set that Cantor proposed in *Grundlagen einer allgemeinen Mannigfaltigkeitslehre* (1883) made explicit that this category is indebted to Plato’s *εἶδος* or *ἰδέα*.<sup>14</sup> Ultimately, this equivocation does not survive in Badiou’s work. Eidos,

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<sup>12</sup> Badiou, Alain, *The Century*, trans. by Alberto Toscano (Cambridge: Polity, 2007), p. 160.

<sup>13</sup> Badiou, Alain, ‘From the “Red Years” to the Communist Hypothesis’ [Interview with Tzuchien Tho], in *The Rational Kernel of the Hegelian Dialectic*, ed. and trans. by Tzuchien Tho (Melbourne: re.press, 2011), p. 102.

<sup>14</sup> Dauben, Joseph Warren, *Georg Cantor: His Mathematics and Philosophy of the Infinite* (Princeton: Princeton University Press, 1990), p. 170.

the visible aspect of the idea—or, in Badiou’s language, ‘*what the artistic act authorizes by way of a new thinking*’<sup>15</sup>—is operative in *Being and Event* as the poem, but is subsequently replaced by a mathematics of appearance in *Logics of Worlds* (2006).<sup>16</sup> To this end, the trajectory of his thought is uncompromisingly towards the purification of the idea.

For Badiou, it is the univocal address of mathematical discourse that establishes its privileged connection with philosophy. In a little book recently published to popularize creative mathematics, *In Praise of Mathematics* (2015),<sup>17</sup> Badiou affirms Arpad Szabo’s view that ‘rational philosophy and mathematics originated at the same time’ in the fifth century BCE.<sup>18</sup> From that point onwards, mathematics served as the paradigm of step-by-step proof, which can, in principle, be followed by anyone. In this sense, ‘mathematics is the best of human inventions for practicing something that’s the key to all collective progress and individual happiness: rising above our limits in order to touch, luminously, the universality of the true.’<sup>19</sup>

The question central to my thesis is, what is the connection between the mathematical idea and the idea of politics? On this point, Badiou is not so clear: ‘Politics itself, in a sense, is also a thinking through forms.’<sup>20</sup> But in what sense? Badiou claims there is no ‘mathematics of politics’ but politics must nevertheless ‘allow for the secrets of thought’ that are ‘marked out’ by mathematics.<sup>21</sup>

My hypothesis is that mathematics constrained Badiou’s conception of politics in the 1960s, and that, after the 1970s—a decade in which the privileged connection was instead between Maoism and philosophy—Badiou returns to the original connection between mathematics and philosophy to enable the further thought of revolutionary action after the failure of Maoism. I take this return to the mathematical idea to be a distinctive contribution to recent debates about the relationship between forms and collective life.

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<sup>15</sup> Badiou, *The Century*, p. 159.

<sup>16</sup> *Logiques des Mondes: L’Être et l’événement*, 2 (Paris: Seuil, 2006); trans. by Alberto Toscano as *Logics of Worlds: Being and Event*, 2 (London: Continuum, 2009).

<sup>17</sup> Badiou, Alain, *In Praise of Mathematics*, trans. by Susan Spitzer (Cambridge: Polity, 2016).

<sup>18</sup> *Ibid.*, pp. 23–25.

<sup>19</sup> *Ibid.*, p. 104.

<sup>20</sup> Badiou, ‘From the “Red Years” to the Communist Hypothesis’, p. 103.

<sup>21</sup> *Ibid.*, p. 103.

Badiou's approach to form can be usefully compared to that of Caroline Levine, who, in *Forms: Whole, Rhythm, Hierarchy, Network* (2015), contends that 'bounded wholes' and 'their power to hold things together is what makes some of the most valuable kinds of political action possible.'<sup>22</sup> While Badiou's early work on mathematical form is broadly in line with this approach, his later work, especially *Being and Event*, presumes that genuine political activity is modelled by the immanent unbinding of bounded wholes: it is precisely the limited power of form to hold the multiple together that is the secret of thought. Beyond 'the formalism of the [Maoist] Party'—'a form that almost crushes [*écraser*] the content'<sup>23</sup>—Badiou turns to the mathematical paradigm of the generic set to model 'formalized in-humanism'<sup>24</sup> which is based on 'the exception': that which has 'no acceptable nature. That is the only basis from which to envisage generic humanity, as what stands beyond every right.'<sup>25</sup>

As Badiou has recollected, his early engagement with mathematical form was limited because he believed that 'if mathematics were able to achieve the secrets of thought it was because of its a-subjectivity.'<sup>26</sup> The first crucial shift in his thinking occurred at the beginning of the 1970s when the question of the political subject—at the time, conceived as the proletarian party—was central to his philosophy. Since the 1980s, the idea of mathematics has taken on renewed importance in Badiou's philosophy: not only does it access the secrets of thought, above all, it models the activity of the subject, namely, how form has the power to surpass the limits of established formalisms. The category of mathematical set is absolutely central to this endeavour because, as is well-known, in itself, it is unconceptualizable—there is no set of all sets. Badiou's peculiar Platonism is axiomatic. It departs from a decision on Plato's hypothesis of the form of the Good. Substituting 'the True' for 'the Good', Badiou asserts: 'there is no idea of the idea. This absence, moreover, can be named "Truth".'<sup>27</sup> A truth then, is the fundamental absence constitutive of any formalism, and a subject is defined as the operator of the formalization of a truth, thereby passing

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<sup>22</sup> Levine, Caroline, *Forms: Whole, Rhythm, Hierarchy, Network* (Princeton: Princeton University Press, 2015), p. 27.

<sup>23</sup> Badiou, 'From the "Red Years" to the Communist Hypothesis', p. 96.

<sup>24</sup> Badiou, *The Century*, p. 178

<sup>25</sup> Ibid., p. 177.

<sup>26</sup> Badiou, 'From the "Red Years" to the Communist Hypothesis', p. 103.

<sup>27</sup> Badiou, Alain, *Second Manifesto for Philosophy*, trans. Louise Burchill (Cambridge: Polity, 2011), p. 107.



beyond the limits of the existing formalism and creating new forms. This notion of the creation of forms goes beyond what Luce Irigaray famously objected to as the problem of '[t]he *one* of form',<sup>28</sup> namely that form is essentially the desire for unified wholeness and by extension the willingness to establish borders, exclude others, operate systems of control, and suppress heterogeneity. In my view, Badiou's work provides a valuable lesson on the continued importance of the power of inventive formal thinking today. Although his subversion of structuralism with a mathematical theory of the subject is quite brilliant, I think the privilege he grants mathematical form frames the question of political organization today too much in terms of the invention of completely new forms of organization and focuses on belief in the idea of communism beyond political anxiety rather than our common capacity to organize.

In my reading of Badiou's work, I distinguish four periods which are marked by points at which Badiou's thought takes decisive turns. I take Badiou's early work to be everything that he conceived prior to May '68 and had published by 1969. The key works in this period are the (anti-)novels *Almagestes* (1964)<sup>29</sup> and *Portulans* (1967),<sup>30</sup> 'The Autonomy of the Aesthetic Process' (1965),<sup>31</sup> 'The (Re)commencement of Dialectical Materialism' (1967),<sup>32</sup> and *Concept of Model* (1969).<sup>33</sup> The second period is that of Badiou's Maoism, between 1970 and 1979, when he wrote journalism and political and philosophical pamphlets; the principal texts are *Théorie de la contradiction* (1976) and *De l'idéologie* (1976). The third, is that of *Theory of the Subject* (1981). The fourth runs from *Being and Event* (1988) to the present; and includes *Logics of Words* (2006), *The Communist Hypothesis* (2008) and *The Rebirth of History* (2011). Continuities and discontinuities exist between these periods, for example, the privileged connection between philosophy and mathematics is common to *Concept of Model* and *Being and Event*, while the reversal of priority in the couple logic/mathematics clearly

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<sup>28</sup> Irigaray, Luce, *This Sex Which Is Not One*, trans. by Catherine Porter with Carolyn Burke (Ithaca: Cornell University Press, 1985), p. 26.

<sup>29</sup> Badiou, Alain, *Almagestes* (Paris: Seuil, 1964).

<sup>30</sup> Badiou, Alain, *Portulans* (Paris: Seuil, 1967).

<sup>31</sup> Badiou, Alain, 'L'Autonomie du processus esthétique' [June 1965], *Cahiers Marxistes-Léninistes*, 12–13 (July–October 1966), 77–89; trans. by Bruno Bosteels as 'The Autonomy of the Aesthetic Process', in *Radical Philosophy*, 178 (March–April 2013), 32–39.

<sup>32</sup> Badiou, Alain, 'Le (Re)commencement du matérialisme dialectique', *Critique*, 240 (May 1967), 438–67; trans. by Bruno Bosteels as 'The (Re)commencement of Dialectical Materialism', in *The Adventure of French Philosophy*, ed. by Bruno Bosteels (London: Verso, 2012), pp. 133–170.

<sup>33</sup> Badiou, Alain, *Le concept de modèle: Introduction à une épistémologie matérialiste des mathématiques* (Paris: Maspéro, 1969; repr. with a new preface Paris: Fayard, 2007); trans. and ed. by Zachary Luke Fraser and Tzuchien Tho as *Concept of Model* (Melbourne: re.press, 2007).

distinguishes Badiou's thought in these two periods. The most important discontinuity is between the Badiou's early work and the pamphlets of the 1970s. In addition to significant reversals regarding the status of the subject and ideology, philosophy is exclusively concerned with the illumination of communist ideas and serves revolutionary political practice. Finally, I take the unity of Badiou's work to be retrospective. Although, to some extent, his early work anticipates his later work, it would be a mistake to suppose that it is always already his later work. This is because politics interrupts Badiou's early formalism, and although formalism returns, it does so on condition that the formalization of political truths includes a subject.

In chapter 1, I hope to show that Badiou's early interest in the visibility of aesthetic form is key to understanding the trajectory of Badiou's thought towards a purification of the idea. The focus is on *Almagestes* because it manifests the possibility of an aesthetic axiomatization of language in which one element from a mass of aesthetic material is selected as the form which authorizes a totalization. The chapter also includes some discussion of *Portulans* and I relate *Almagestes* to Badiou's theory of aesthetic autonomy in 'The Autonomy of the Aesthetic Process'. In the first section, my discussion of aesthetic form is framed by the question of the extent to which *Almagestes* is Sartrean. My argument is that although, like Sartre, Badiou is sceptical of the autonomy of language, he seeks to aesthetically envelop the detotalizations of language in line with Roland Barthes' structuralist approach to writing rather than Sartre's notion that expression is directed by an act of intentional consciousness. The second section explains the mechanism of the aesthetic totalization in 'La Première Vérité', the final chapter of *Almagestes*. I link this to Badiou's later reflections on Wagnerian harmony and the idea of the 'cosmos' in Severo Sarduy's prose. In the third section, I show that *Almagestes* exemplifies the notion of re-aestheticization of aesthetic material through open intervals. I argue that, although, in *Almagestes*, this is deployed as a means to imagine political action (the totalization that results from this axiomatization is an image of a political demonstration), this is a conception of the aesthetic that is ultimately a law unto itself and therefore closer to the purely allegorical form of Mallarméan truth than the political commitment of Badiou's Maoist peers in the mid-1960s.

In chapter 2, the focus shifts to Badiou's theory of the late 1960s. The aim of the chapter is to demonstrate how Badiou purifies Althusserian 'science' and to assess the limits of the application of this purification to politics. In the first section, I reconstruct

Badiou's axiomatic interpretation of Althusserian theory in 'The (Re)commencement of Dialectical Materialism', the distinctive move of which is the substitution of the mathematical category of set for the notion of object. The consequence is that two significant modifications are made to Althusser's theory: contradiction is excluded and anti-empiricism becomes non-empiricism. In the second section I outline Badiou's distinctively mathematical approach to structure, and in the third, I discuss the limits of Badiou's slightly anachronistic approach to model theory in *Concept of Model*, especially regarding its suitability to serve as what Badiou calls 'proletarian' logic. Ultimately, I conclude, the limitation of this theory for that purpose is that in it truth is intelligible without reference to objects and without the function of a subject.

The aim of chapter 3 is to understand why, after having introduced a theory of the political subject in the 1970s, does Badiou return to mathematical logic in *Theory of the Subject* at the beginning of the following decade. The first two sections trace the effects of May '68 and its consequences on Badiou's thought. He changed his mind about the role of the subject in philosophy, and, whereas previously he had celebrated the bounded whole of permutation structure for thinking the causality of social transformation, he henceforth understood this as the obstacle to revolutionary politics. In the third section, I demonstrate that the logic of history presented in the political pamphlets *Théorie de la contradiction* and *De l'idéologie* relies on the formal power of classical negation. The consequence is that, although this logic claims to predict the end of history, it is actually a logic of history as a process with a vanishing subject, which in my view, is best understood in terms of Lacanian anxiety. The fourth and fifth sections are devoted to understanding Badiou's partial return to mathematical formalism in *Theory of the Subject* as a means to circumvent the problem of the anxious political subject, and how mathematical form can provide a formal support for thinking prescriptive politics in the post-Maoist context.

Chapter 4 is concerned with the Platonism of Badiou's set-theory ontology and how this constrains his conception of politics. The argument of this chapter is that the ontology of *Being and Event* replaces history with a logic of retroaction whose model is set-theoretical forcing, and that the retroactive logic of appearance in *Logics of Worlds* is ultimately little more than an accessory to set-theory ontology. The aim of the first section is to show how, in Badiou's ontology, retroactive implication is the form of universal thought, and that the way this operates in the forcing of generic extensions to set-theoretical domains is paradigmatic for the politics of *Being and Event*. This section also discusses how, via philosophy, the poem remains indispensable to the political

activist in *Being and Event*. The second section focusses on the theory of the object that is central to *Logics of Worlds*. I argue that in Badiou's limited use of category theory, the retroaction of the object on being does not go beyond the notion that logics are immanent to the pure multiples of ontology. In particular, this stops short of the possibility that purely abstract generic multiples can be intuited through the category of sheaf, which would cause considerable problems for Badiou's theory of the subject. In the final section, I consider Badiou's recent work on the idea of communism and his application of his theory of the object to the phenomena of rioting in *The Rebirth of History*. In my view this shows that, ultimately, the privilege that Badiou accords to the mathematical idea results in a conception of political practice as ideation, which is inherently an anxiety-inducing experience.

I have quoted from the available English translations of Badiou's works where possible and marked modifications that I have made. The translations from *Almagestes*, *Portulans* and *De l'idéologie* are my own. I referred to Zachary Fraser's unpublished draft translation of chapter 1 of *De l'idéologie*. The citations from *Théorie de la contradiction* are also my own except for those from chapter 1 (pages 1–26), which are from Alberto Toscano's published translation 'An Essential Philosophical Thesis: It is Right to Rebel Against the Reactionaries'. The page references to these four works are to the original printed French editions throughout.

## Aesthetic Autonomy and Truth

This aim of this chapter is to show that Badiou's early 'novels'—*Almagestes* (1964) and *Portulans* (1967)—are important to understanding the development of Badiou's early formalism. I hope to show that, as far as the sequence of his published work is concerned, this begins with a literary preoccupation with the aesthetic whole oriented by questions about how far this can serve as an analogue of political action.

In the first, and longest, section I will argue that although *Almagestes* departs from a broadly Sartrean suspicion towards the autonomy of language, it is more 'structuralist' in the way it approaches the figuration of verbal discourse. The second section clarifies the logic of the final chapter of *Almagestes*—'La Première Vérité'—and explains how it is figured as the appearance and disappearance of an aesthetic object (the image of a political demonstration). In the final section I introduce the Althusserian context in which Badiou published 'The Autonomy of the Aesthetic Process' (1965), and demonstrate that *Almagestes* exemplifies the topological comparison in this conception of aesthetic autonomy.

*Almagestes* was published in March 1964 by Éditions du Seuil on the recommendation of the editor François Wahl.<sup>1</sup> It was Badiou's first major publication,<sup>2</sup> and the first instalment of a planned trilogy titled *Trajectoire inverse*. The titles of the volumes were taken from a fragment of Saint-John Perse's poem *Exile*, which featured as the epigraph of *Almagestes*: 'he who deals, in the town, in such great books as almagesta, portulans and bestiaries'.<sup>3</sup> The second volume, *Portulans* followed in the Autumn of 1967. In between, Badiou published two texts which aimed to purify Althusserian theory—'The Autonomy of the Aesthetic Process' (1965) and 'The

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<sup>1</sup> Prasteau, Jean, 'Alain Badiou (26 ans) "reprend les choses où Joyce les a laissées"', *Le Figaro Littéraire*, 27 February 1964, p. 4.

<sup>2</sup> While a student at the École Normale Supérieure (1956–1961), Badiou published several articles in the student journal *Vin nouveau*, of which, 'Cinematic Culture' (1957) has recently been re-issued: Badiou, Alain, 'Cinematic Culture', trans. by Susan Spitzer, in *Cinema*, ed. by Antoine de Baecque (New York: Polity, 2010), pp. 21–33.

<sup>3</sup> Perse, Saint-John, *Exile*, trans. by Denis Devlin, in *Exile and Other Poems* (New York: Pantheon, 1962), p. 33.

(Re)commencement of Dialectical Materialism’ (1967)—and wrote what is widely regarded as the hyper-Althusserian text ‘Mark and Lack’ (signed January 1967).<sup>4</sup> I will discuss Badiou’s axiomatization of Althusser’s theory in the next chapter; my focus here will be on the extent to which *Almagestes* is structuralist. *Bestiaires*, the third volume of *Trajectoire inverse*, dubbed the ‘totalizing history of constellations’ in the foreword of *Almagestes* (A 9), never appeared. In early-1969, Badiou confirmed that he was no longer working on the trilogy: ‘for political reasons I became singularly distant— May ’68 is for us all an essential break’.<sup>5</sup>

*Almagestes* and *Portulans* have received very little attention beyond the reviews in journals and newspapers around the time of their publication.<sup>6</sup> Cécile Winter’s ‘Les romans d’Alain Badiou’ (2010)<sup>7</sup> remains the only other published text on them. Before we move on to the sections of this chapter, it is therefore necessary to provide summaries of these two books. I will summarize *Almagestes* in more detail as it is the subject of the subsequent discussion.

*Almagestes* is a literary work concerned with stylistic unity at the intersection of existentialist and structuralist currents.<sup>8</sup> In a television interview in April 1964, Badiou declared his intention of ‘once again finding a certain sense of the whole [*tout*].’<sup>9</sup> *Almagestes* is not a theory of the aesthetic but a ‘model’ (A 9) which demonstrates that although the detotalizing mechanisms of language corrupt the purity of the aesthetic order, it is nevertheless always possible to posit aesthetic unity and thereby constrain the mechanisms of language. Furthermore, it claims that this process is the aesthetic analogue of political action. According to the summary at the end of the book: ‘*Almagestes* liquidates its subject (expressive baroque) by subjecting it to the test of

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<sup>4</sup> Badiou, Alain, ‘Marque et Manque: à propos de Zéro’ [January 1967], *Cahiers pour l’analyse*, 10 (Winter 1969), 150–173; trans. by Luke Zachary Fraser and Ray Brassier as ‘Mark and Lack: On Zero’, in *Concept and Form*, ed. by Peter Hallward and Knox Peden, 2 vols (London: Verso, 2012), I, 159–185.

<sup>5</sup> Letter from Badiou to Mark Carlin Homonoff, 27 January 1969, cf. Homonoff, Mark Carlin, ‘Language as Revolution: A Critique of Alain Badiou’s *Almagestes*’ (unpublished undergraduate thesis, Harvard University, March 1969), p. 34.

<sup>6</sup> See ‘Reviews, Essays and Interviews related to *Almagestes* and *Portulans*’ in the References section below.

<sup>7</sup> Winter, Cécile, ‘Les romans d’Alain Badiou’, in *Autour d’Alain Badiou*, ed. by Isabelle Vodez and Fabian Tarby (Paris: Germina, 2011), pp. 353–376.

<sup>8</sup> Cf. the back cover, where Badiou advertises it as: ‘Neither novel nor essay, but a literary work [...] and an experience of thought’.

<sup>9</sup> Interview with Pierre Desgraups on the television show *Lecture pour tous*, cf. Tho, Tzuchien and Giuseppe Bianco, ‘Introduction’, in *Badiou and the Philosophers* (London: Bloomsbury, 2013), p. xxvi.

human violence.’ (A 310). The relation between politics and history remains unclear in *Almagestes*; history was slated to be the topic of the third volume, which never appeared. Its relation to politics is not that of reflecting an existing order but rather that of anticipation: ‘this book is anterior to the human order, whose exact apparition it postpones’ (A 9). There is no overarching plot, however we are told in the foreword that the ‘order’ of the book ‘exists’ and is ‘essential’ (A 9). Although in many ways an anti-novel, there are characters—Bérard, Chantal, Dastaing and Fréville—and the action—a political demonstration—takes place in Sannam, a city in the fictional colonial nation Torrital, which is under the rule of the imperialist oppressor Cortase.

The scene of action only becomes clear in the tenth and final chapter. It appears in flashes in the first eight chapters, and we learn that Bérard is a loyal communist, Dastaing a flamboyant revolutionary, Chantal pensive, and Fréville has unionist tendencies. However, these chapters are essentially meditations on the detotalizing nature of language and how humans are trapped in its game-like structures. These meditations fall into three categories: myth, poem, and prediction.

The book begins with a version of the myth of Babel, in which words are bricks and syntax mortar. Humanity is condemned to labour in the desert on the construction of a massive monument to God’s power, which, due to the deviousness its designer, is impossible to complete no matter how hard they work. The chapter is composed of long, fragmentary sentences packed with clauses and parentheses. It begins: ‘The bricks used to build the Tower, from where Man can see beyond the edge of worlds (and thus, The Lord without Other, hunting with barking hounds, in the slick foam of the morning, [...]), are quirky slabs, a few already the fragments of a puzzle whose pieces fit together such that no cement is required.’ (A 13). Later, Badiou sums up this verbose renewal of the myth in a hypertranslation of the original biblical tale, in which Babel is described in a typically incongruent phrase: ‘A meretrizical tower of the Word’ (A 223).

In the same chapter, another classic myth is reworked, that of Prometheus, to illustrate the fantasy of salvation by killing the representative of the law. The ‘archangel’ Prometheus (A 27) leads a young disciple Artim beyond the realm of mortals to the top of the tower where they encounter the ‘judge’ of immortality. To pass, the travellers must prove that they are not bound by the human condition of identifying themselves with their words. Failing to heed Prometheus’ advice, Artim approaches first with naive self-assurance. The judge asks a simple question: ‘Is it you, Artim?’ (A 43) To which Artim artlessly replies: ‘Yes, it’s me, but I beg... I beg...’ [*mais je vous... je vous...*], and without hesitation, the judge strikes him down. Asked a

similar question, Prometheus obfuscates until, having lured the judge close enough that he can whisper in his ear, he retorts: ‘No judge, no, I’m not Prometheus!’, and grabs the judge by the neck, strangling him to death (A 45). ‘Strangely sad’ (A 46), he descends victorious yet alone, with his dead companion in his arms to deliver his message to the people: the price of freedom through technical mastery and cunning is the death of man.

The second chapter, ‘Bérard’, is a meditation on the myth of intentional expression, and which will feature later in this chapter. In a dialogue between Bérard and Fréville, expression is figured as the selection of words from the reserve of ‘silent concretions’ (A 307).

The meditations on the poem begin with ‘Ailleurs II’, a nocturnal café scene in which an anonymous couple debate whether language can access ‘the scheme of things’ [*le complot des choses*] while the waiter closes for the night (A 76). ‘Chantal’ is a sequence of entries in her diary. She seeks the ‘calm’ of the ‘silent’ cause of things, and is especially fond of mathematical formulas and musical notation, which appear frequently in her diary. In one entry, she writes: ‘I love mathematical writing. It is flexible, it resembles those long blades of grass that one finds in the mountains in flooded clearings’ (A 103). In another: ‘Music, that perfect language which can name everything, not a sign, it seems, but the secret of things, their prayer. My true language...’ (A 101). One of the musical phrases she quotes—the theme of faith from Wagner’s *Parsifal*—will turn out to be the organising principle of the final chapter.

The shortcoming of prediction in a world governed by chance is playfully illustrated in ‘Ailleurs III’, ‘Dastaing’ and ‘Ailleurs IV’. Observing the action in the streets from above like the audience in a theatre, ‘gamblers’ bet on what will happen next, falsely presuming that things always conform to a scheme. No sooner than an order becomes perceptible, something happens to defy it.

Chapter 9, ‘Scories’, is an ‘ironic study’ (A 309) which comprises statistical information about the occurrence of colours, animals and proper names in the first eight chapters, and indulges, as Badiou puts it: ‘My taste for numbers and unfounded symmetries’ [*symétries infondées*].

The concluding chapter, ‘La Première Vérité’, attempts ‘to obtain a *point of equilibrium* between the theme of the era (that of action) and the aesthetic rhetoric debated in the book.’ (A 310). This chapter balances the meditations on the lack of genuine freedom *within* language games by showing that material from the preceding chapters can be reorganized into an image of a political demonstration. The aesthetic principle at work in this is the notion that it is always possible to impose a different



organizational pattern onto a given structure by selecting one of its elements and applying its form to all the others. In ‘La Première Vérité’, Chantal’s transcription of Wagner’s theme of faith (in her diary) turns out to be the unifying principle of the image, and it is therefore retrospectively clear that, like the delayed harmony typical of Wagnerian overtures, the aesthetic unity of *Almagestes* is postponed but comes in the end. This organization is obscure, and it is hard to imagine many readers recognizing it without following the directions in the appendix ‘Pistes’, to which the reader is referred in the foreword (A 9). The second section of this chapter will explain how this type of unity is essentially that of spatial coherence.

*Portulans*, published in October 1967, advertises itself as a ‘novel’, and is concerned with aesthetic subjectivity in the sense of a logic underlying narrative. The plot follows the parallel careers of eight characters in Torrital. Four of the characters are familiar from *Almagestes*; the new ones are Tellier, Claire, Pierre, and an empty place—the gap which must be closed to make the composition complete. *Portulans* is divided in two: Part one is titled ‘Composition of a disorder’ and part two ‘Decomposition of an order’. In ‘Nuit’, the first chapter of part one and the pivotal chapter of the book, ‘Stéphane’, who, up until that point had merely been the name of the narrator or ‘representative of the writer in the book’ (P 413), occupies the vacant role in the game (for example, to love Claire and ‘produce’ Tellier). To do this, he summons ‘his other, Stéphane the second,’ to represent him in the structure of which he is the master (P 413). Stéphane’s duplicity is unsustainable: the only way he could close the composition would be to relinquish his determining role and simply be a character. However, as the designated ‘guardian of the law’ (P 413) Stéphane is bound to his determining role and can only continue to fill the gaps in the structure by making his representative disappear from the action so that he can fill in gaps elsewhere. He is the operator of reversal: he is both the animator of the drama, that is the ‘zero’ element of the combinatory of characters, and one of the characters. His unique status in the drama—the presence of a zero as a one—is figured as a ‘poem’ in the prologue: ‘Seven subtracted from eight equals zero!’ (P 13).

## SARTREAN BEGINNINGS?

For us the real problem is to define conditions in which there can be universality

—Sartre, *Existentialism and Humanism*

Prior to its publication, the first chapter of *Almagestes* was previewed in *Les Temps Modernes* with a short introduction by Simone de Beauvoir.<sup>10</sup> Beauvoir praises the ‘surprising mastery’ with which Badiou captures ‘violence in language’ in the final chapter, and closes by affirming that it ‘is a prelude to the genesis of human order.’<sup>11</sup> Almost three years later, Beauvoir acknowledged *Almagestes* as an influence on *Les Belles Images* (1966).<sup>12</sup> In this book ‘about truth’, Beauvoir remarks that Laurence, ‘who is trapped by the world in which she lives’, is ‘a being in flight’ [*un être fuite*] who frequently leaves her phrases unfinished and that her path towards ‘truth’ is ‘without end’: ‘she is like the mole that opens its eyes and sees that it is black. I have borrowed this comparison from Alain Badiou’s *Almagestes*.’<sup>13</sup> Beauvoir met frequently with Badiou in 1958 when he was a student at the École Normale Supérieure. She recalled one of these occasions, 23 September 1958, in the third volume of her autobiography: they discussed the situation in Algeria and the forthcoming referendum on the French Fifth Republic, in the lead-up to which there were frequent demonstrations in Paris.<sup>14</sup> These meetings were initiated by a long letter that Badiou wrote to Beauvoir in 1957 about her critique of Merleau-Ponty’s *Phenomenology of Perception* in *Les Temps Modernes*.<sup>15</sup> In an interview on the eve of the publication of *Almagestes*, Badiou recalled: ‘Those meetings were very valuable to me. Certain choices I made crystallized around them.’<sup>16</sup>

Although the critical reception of *Almagestes* was mixed,<sup>17</sup> praise from Sartre made *Almagestes* a literary sensation. In an interview in *Le Monde* in April 1964,<sup>18</sup>

<sup>10</sup> Beauvoir, Simone de, ‘Sur *Almagestes*’, *Les Temps modernes*, 212 (January 1964), 1187–88.

<sup>11</sup> Ibid., p. 1188, my trans.

<sup>12</sup> Beauvoir, Simone de, *Les Belles Images*, trans. by Patrick O’Brian (London: Flamingo, 1985) [1966].

<sup>13</sup> Beauvoir, Simone de [Interview with J. Piater], ‘Simone de Beauvoir présente Les Belles Images’, *Le Monde*, 23 December 1966, p. 17, my trans.

<sup>14</sup> Beauvoir, Simone de, *Force of Circumstance*, trans. by Richard Howard, Autobiography, vol 3 (London: Penguin, 1968) [1963], p. 456.

<sup>15</sup> Beauvoir, Simone de, ‘La phénoménologie de la perception de Maurice Merleau-Ponty’, *Les Temps modernes*, 1.2 (November 1945), 363–67.

<sup>16</sup> Prasteau, ‘Alain Badiou (26 ans) “reprend les choses où Joyce les a laissées”’, p. 4.

<sup>17</sup> Some lavished praise: ‘it is a master stroke, an accomplished work’, cf. Prasteau, p. 4, , my trans. The only Anglophone reviewer struck a more cautious note: ‘M. Badiou may startle us yet—for the moment he is interesting.’ Cf. Lehmann, Andrew George, ‘Word-Building with Rules’, *Times Literary*

Sartre reflected on how his approach to writing changed as he had become more politicized. He discusses his autobiography *Les Mots* (1963), which reflects on the fraught passage out of his ‘neurosis’ that he ‘was born to write’ to his awakening as a political writer.<sup>19</sup> *Almagestes*, Sartre claimed, exemplified the way in which a Western writer could serve universality:

Like morality, literature needs to be universal. So that the writer must put himself on the side of the majority, of the two billion starving, if he wishes to be able to speak to all and be read by all. Failing that, he is at the service of a privileged class and, like it, an exploiter. To find this total public he has two ways: the momentary renunciation of literature in order to educate the people which has been accepted by Soviet writers. In a country lacking leaders, in Africa, for instance, how could a native educated in Europe refuse to become a professor, even at the price of his literary vocation? If he preferred to write novels in Europe, his attitude would appear to me verging on treason. Despite an apparent contradiction there is no difference between service to an entire community and the requirements of literature.

The second way, applicable to our non-revolutionary societies, to prepare for the time when everyone will read, is to pose problems in the most radical and intransigent manner. This is what Alain Badiou has just done in *Almagestes*, where he puts language on trial with an intention of cleansing [*décrassage*], of catharsis.<sup>20</sup>

However, the question is just how Sartrean is *Almagestes*? In this section, I will argue that although *Almagestes* adopts a broadly Sartrean suspicion towards the autonomy of language as its point of departure, it ultimately demonstrates a more structuralist approach to the determination of verbal discourse. By structuralist here, I mean an approach to language broadly in line with the transformational generative approach to language developed by Noam Chomsky. As with Barthes’ semiological work, this approach takes a given corpus as its point of departure and segments its utterances in order to classify and transform.<sup>21</sup>

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*Supplement*, 3 September 1964, p. 792. Others attacked: ‘a book of bad faith, reader. A devious [*malin*] book.’ Cf. Demougin, Jacques, ‘Almagestes’, *Mercure de France*, 1209–1210 (July–August 1964), 550, my trans. ‘[W]ith *Almagestes* the devil managed his greatest trick; by presenting us with a tremendously boring hell, we believe it does not exist.’ Cf. Le Dantec, Marille Latil, ‘Almagestes et le langage’, *La Table Ronde*, 200 (September 1964), 113, my trans.

<sup>18</sup> Sartre, Jean-Paul [Interview with Jacqueline Piater], ‘Jean-Paul Sartre s’explique sur *le Mots*’, *Le Monde*, 18 April 1964, p. 13; trans. by Anthony Hartley as ‘A Long, Bitter, Sweet Madness: An Interview with Jean-Paul Sartre’, *Encounter*, 22.6 (Jun 1964), 61–63.

<sup>19</sup> Sartre, ‘A Long, Bitter, Sweet Madness’, p. 61.

<sup>20</sup> *Ibid.*, p. 62.

<sup>21</sup> Lavers, Annette, *Roland Barthes: Structuralism and After* (London: Methuen, 1982), p. 218.

There is no denying that Sartre's influence on Badiou's thought, especially the works of the 1940s, which remained a point of reference for him at the beginning of the 1960s. Badiou remained faithful to the existentialist principle of the fundamental emptiness of being but distanced himself from Sartre's account of the conscious determination of meaning and authorial control over language. For similar reasons, he found the account of the determination of structure in *Critique of Dialectical Reason* (1960) problematic. In a recent interview, Badiou recalls reading it with a group of young Sartreans that included Emmanuel Terray:

some of us were in tension with this latest effort of Sartre. For on the other hand, we were perhaps already more committed to the alternative theoretical approach. In this, there was an element of conviction which went far beyond pure philosophy, because it also involved discussions about the *Nouveau Roman* of Robbe-Grillet and the cinematic *New Wave*.<sup>22</sup>

As Jacques Rancière has recalled, Sartre's visit to the École Normale Supérieure to 'celebrate' the publication of *Critique of Dialectical Reason* 'was more like a burial [...] It really was the swan song of existentialism.'<sup>23</sup> The problem, at least for Badiou, was that 'we were no longer able to believe in the engendering of the general system of formal structures on the basis of the simple internationalities of consciousness.'<sup>24</sup> Four years later, when Sartre praised Badiou's 'intention of cleansing' language, he seemed unaware of the distance Badiou had taken on this point.

There are three general points on which Sartre's influence on *Almagestes* is apparent. First, the Sartre of the 1940s had inspired Badiou to be a novelist, in what he described as the French tradition that goes back to Voltaire and Rousseau, 'in which philosophy and literature were undistinguished.'<sup>25</sup> Second, an eclectic mix of styles and tastes is essential to this kind of philosophical writing. In the late 1950s when Badiou was planning *Almagestes*, he published five articles in the student journal *Vin nouveau*. He wrote about cinema, poetry, music, song, and politics because they were the topics that 'mattered' to him at the time.

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<sup>22</sup> Badiou, Alain, 'Theory from Structure to Subject: An Interview with Alain Badiou' [Interview with Peter Hallward], trans. by Steven Corcoran, in *Concept and Form*, II, 275.

<sup>23</sup> Rancière, Jacques, 'Only in the Form of Rupture: An Interview with Jacques Rancière' [Interview with Peter Hallward], trans. by Cécile Malaspina, in *Concept and Form*, II, 26.

<sup>24</sup> 'Theory from Structure to Subject', p. 278.

<sup>25</sup> Badiou, Alain, 'Les Mathématiques sont la seule discipline capable d'expliquer l'être' [Interview with François Gauvin], *Le Point*, 4 April 2011. <[http://www.lepoint.fr/grands-entretiens/badiou-les-mathematiques-sont-la-seule-discipline-capable-d-expliquer-l-etre-04-04-2011-1314877\\_326.php](http://www.lepoint.fr/grands-entretiens/badiou-les-mathematiques-sont-la-seule-discipline-capable-d-expliquer-l-etre-04-04-2011-1314877_326.php)> [Accessed August 2017]

The truth is, behind all this can be glimpsed the silhouette of the person who was my role model at the time, Jean-Paul Sartre, Sartre and his ‘Situations’, Sartre and his political interventions. That sort of philosophical writing about everything and anything [...] A stimulating conception was then emerging of philosophy as an activity conditioned by tastes and interests that precede it. [...] It’s this multi-faceted dimension that creates the possibility of philosophy.<sup>26</sup>

Third, the writer is political. *Almagestes* aimed to achieve ‘a point of equilibrium’ between meditations on the problem of language and ‘the theme of the time’, political action (A 310).

However, on three specific points Badiou’s distance from Sartre in 1964 is clear. First, the initial framing of the problem of language in *Almagestes* as the myth of Babel recalls Lévi-Strauss’ presumption that the formal structures which regulate social life already exist as myths. Unlike the phenomenological tradition which, after Husserl, supposes that polysemy results from the sedimentation of equivocal meanings over time, *Almagestes* begins with the myth of the eternal ruin of univocity. In 1957, while still at the École Normale Supérieure, Badiou had undertaken a close reading of Lévi-Strauss’ *The Elementary Structures of Kinship* (1949)<sup>27</sup> with Emmanuel Terray and Paul Verstraeten. Badiou’s taste for maths and formal structures attracted him to Lévi-Strauss’ work, especially his use of group theory and André Weil’s mathematical appendix in *The Elementary Structures of Kinship*. Secondly, *Almagestes* takes a decidedly non-Sartrean attitude towards humanism: only Prometheus, a demi-God, can pass the trial of language. To mark this distinction, Badiou’s Prometheus receives the proper name Man: ‘Prometheus is not a man, he is Man.’ (A 27); and based on his paradoxical authority—‘I am mandated without a mandate’—Prometheus tells Artim that he wants to make generic man ‘impossible, since he *is impossible*’ (A 36). On this point, Badiou’s Prometheus is close to André Gide’s. On 4 November 1929, Gide wrote in his *Journal*:

today we rate humanity much too high; that man is not interesting, important, worthy to be adored, for his own sake; that what invites humanity to progress is precisely not to consider itself (and its comfort and the satisfaction of its desires) as an end, but rather as a means through which to achieve and realise something. This is what made me say, through the

<sup>26</sup> Badiou, Alain, ‘Cinema Has Given Me So Much’ [Interview with Antoine de Baecque], trans. by Susan Spitzer, in Badiou, *Cinema*, p. 5.

<sup>27</sup> Lévi-Strauss, Claude, *The Elementary Structures of Kinship*, trans. by James Harle Bell, John Richard von Sturmer and Rodney Needham (London: Eyre & Spottiswoode, 1969).

person of my Prometheus: “I do not love man; I love what devours him,” and made me put my wisdom in this: knowing how to prefer to man the eagle that feeds on him.”<sup>28</sup>

The third point, which I will discuss in more detail for the rest of this section, is the status of language. I will frame this in terms of the distinction between structuralist and phenomenological approaches established in the late-1950s; which revolves around the opposition of the literal and the referential, that is, around the difference between the pure production of the text within language and the presumption that a work of literature is the expression of an author who has ‘something to say’.

In the Western tradition, the problem goes back at least as far as Plato’s *Cratylus*, in which the basic dispute is between naturalism, which holds words are inherently meaningful due to an essential relation between word and thing (reference), and conventionalism, which holds that this relation is established by rules. Badiou has always defended a radical version of conventionalism in which the determining agency lies even further from nature than consciousness in the autonomous realm of the Idea. He has recently clarified this in terms of his Platonism:<sup>29</sup> beyond Lacan’s residual dependence on a vanishing referent (*objet a*), the autonomous rationality of the sign is constituted by its relation to the Idea, the intelligibility of which rests on the prescriptions of pure thought. *Almagestes* addresses this within the realm of the aesthetic, whose rule is that of the random axiomatization of linguistic material.

In the phenomenological tradition, Sartre defended the notion of a subject behind expression. The basis of his conception of an author’s relation to language was established in his account of the aesthetic in *The Imaginary* (1940), where he distinguished perception and imagination as alternative ways that consciousness relates to the world. Understood as the aesthetic agency of subjective freedom, the imagination provided Sartre with the means to develop a theory of the aesthetic within his overarching philosophical orientation that prioritized human freedom and political commitment. For Sartre, the imagination is the source of authentic aesthetic activity because its unreal and absent object—the image—springs from the spontaneity of consciousness, which motivates the image. Crucially, he holds that the image is acausal, unlike the all too real objects present to perception, the passive aspect of consciousness. However, as Sartre notes, this distinction is problematic. Although the imagination

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<sup>28</sup> Gide, André, *Journals*, trans. by Justin O’Brien, 4 vols (Chicago: University of Illinois Press), III (1928–1939), 78

<sup>29</sup> See Badiou, Alain, ‘Anti-Philosophy: Plato and Lacan’, in Badiou, Alain, *Conditions*, trans. by Steven Corcoran (London: Continuum, 2008), pp. 228–247.

negates the world as it is perceived from a particular point of view, the image ‘can appear only *on the ground* [fond] *of the world*’.<sup>30</sup> Another problem stems from the imagination’s status as ‘an inferior form of thought’.<sup>31</sup> As the synthesis of knowledge and affectivity, the imagination is not pure thought, which is ‘the simple knowledge of relations’ that can ‘posit itself for itself as consciousness of a rule.’<sup>32</sup> The risk is that there is always a possibility of consciousness becoming captive to the imagination, especially when the pure concept is only present as an ideal, because images can only ever lead to other images and never to pure thought.

Sartre developed this into an account of the role of the imagination in writing and reading. The writer, Sartre contended, gives meaning to words by referring them beyond their own materiality to the intended image. From the other side, the reader uses their imagination to form the *analogon* of the image—the aesthetic object. In *What is Literature?* (1948), Sartre distinguished the prose writer, who masters language and exercises directional control over the conveyed meaning, from the poet, who recognizes the impossibility of total authorial control and assumes that existing forms of language are the barrier to true communication. The poet commits themselves to the failure of communication and, taking words as objects, works to create ‘the suggestion of the incommunicable.’<sup>33</sup>

In the early-1970s, Sartre conceded that all communication fails. In *Situations VIII* (1972), he maintained that ‘the prose writer has *something to say*’, but added that this something ‘*is nothing sayable*, nothing conceptual or conceptualizable, nothing which signifies...’.<sup>34</sup> At which point, as Christina Howells has clarified, the most significant communication takes place through the imaginary.<sup>35</sup> Moreover, this effectively renews belief ‘in the human relevance of the kind of art which does not set out directly to *teach* or *change* the world.’<sup>36</sup>

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<sup>30</sup> Sartre, Jean Paul, *The Imaginary: A phenomenological psychology of the imagination*, trans. by Jonathan Webber (London: Routledge, 2010) [1940], p. 185.

<sup>31</sup> *Ibid.*, p. 113, trans. modified.

<sup>32</sup> *Ibid.*, p. 67, 105.

<sup>33</sup> Sartre, Jean Paul, *What is Literature?*, trans. by Bernard Frechtman (London: Methuen, 1986) [1948], p. 24, n. 4, trans. modified.

<sup>34</sup> Sartre, Jean Paul, *Situations VIII: Autour de '68* (Paris: Gallimard, 1972), p. 437, cf. Howells, Cristina, *Sartre: The Necessity of Freedom* (Cambridge: Cambridge University Press, 2009), p. 255.

<sup>35</sup> Howells, *Sartre: The Necessity of Freedom*, p. 144.

<sup>36</sup> *Ibid.*, p. 144.

In 1953, Roland Barthes published *Writing Degree Zero*, in which he had already sketched out a theory for ‘a mode of writing whose function is no longer only communication or expression’, one that ‘is both History and the stand we take in it.’<sup>37</sup> Although influenced by Sartre’s *What is Literature*, Barthes rejected the autonomy of consciousness and the notion that ideas (content) are independent from language (form): ‘there is no thought without language’.<sup>38</sup> For Barthes, writing is ‘the morality of form’ in the sense that it is the ‘choice’ of a standpoint which frames the ‘nature’ of a writer’s language.<sup>39</sup> However this choice is not freely made: writing occupies the space between a language—‘a corpus of prescriptions and habits common to all writers of a period’<sup>40</sup>—and style, the individual deviation from this norm. For Barthes, a mode of writing is a ‘hardened’ and ‘self-contained’ language.<sup>41</sup> Although style individualizes a writer, it is ‘a closed personal process’; ‘the private portion of the ritual, it rises up from the writer’s myth-laden depths and unfolds beyond his area of control.’<sup>42</sup> Only an event in the history of forms—which the writer is powerless to influence—can precipitate a transformation of structure. However, this does not mean that literature can be nothing more than the ‘carcass’ of language. Universal form, Barthes contended could be approximated through the adoption of an oral style in writing. Not in the limited sense of speech within narration, but comprehensively, so that the power of speech—its flexible syntax and the openness of verbal propositions—structures a mode of writing that ‘is potentially the meeting place of all men’,<sup>43</sup> an ideal that Barthes called the ‘degree zero’ of writing.

Barthes’s readings of Alain Robbe-Grillet extend the principle of the ‘disorder’ of speech to the literary object. In ‘Objective Literature’ (1954),<sup>44</sup> Barthes praises the purely visual character of Robbe-Grillet’s objects, whose impenetrable graphic appearance defies any attempt to read an essential meaning in the text. Robbe-Grillet invents ‘for the object a space endowed in advance with its points of mutation, so that

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<sup>37</sup> Barthes, Roland, *Writing Degree Zero & Elements of Semiology*, trans. by Annette Lavers (London: Vintage, 2010) [1953, 1964], p. 7.

<sup>38</sup> *Ibid.*, p. 89.

<sup>39</sup> *Ibid.*, p. 21.

<sup>40</sup> *Ibid.*, p. 15.

<sup>41</sup> *Ibid.*, p. 25.

<sup>42</sup> *Ibid.*, p. 17.

<sup>43</sup> Lavers, Annette, *Roland Barthes: Structuralism and After* (London: Methuen, 1982), p. 58.

<sup>44</sup> Barthes, Roland, ‘Objective Literature’, in Barthes, Roland, *Critical Essays*, trans. by Richard Howard (Evanston: Northwestern University Press, 2000) [1964], pp. 13–24.



the object is dislocated rather than decayed.’<sup>45</sup> The continuity or temporality of the novel is no longer that of plot but the dislocation of an object in a game of changing places and concealment of elements. However, as Barthes observed four years later, Robbe-Grillet’s renewal of literature could easily fall prey to myth if his style were taken as the beginning of a school. The ‘Robbe-Grillet school,’ Barthes insists, ‘does not exist.’<sup>46</sup>

The problem of the unity of the circle of writers around Robbe-Grillet—the *nouveau romanciers*—was analysed in detail by one of its members, Jean Ricardou, in *Problèmes du nouveau roman* (1967).<sup>47</sup> In the conference *Que peut la littérature?*, which left a lasting impression on Sartre, Ricardou had asserted: ‘The writer does not write something... he writes, that’s all. Perhaps it is also in this way that we should understand Maurice Blanchot when he suggests that the writer must feel, most deeply, that he has nothing to say.’<sup>48</sup> In *Pour une théorie du nouveau roman* (1971),<sup>49</sup> Ricardou went further and asserted that the existence of the *nouveau roman* demands the explicit articulation of its theory. As Celia Britten recalls, Ricardou’s theory was attacked by other members who rejected the constraint of ‘a *collective identity*’.<sup>50</sup> Above all, it was the prescriptive aspect of Ricardou’s theory that others found unacceptable. The complaint, as François Jost put it, was that ‘Ricardou teaches us how to write’.<sup>51</sup>

In my view, *Almagestes* occupies a distinctive position relative to the debate about language in France around the time of its publication: its approach to language is structuralist, however it also prescribes how to read the overdetermining effect of the aesthetic function. Badiou’s approach to language is clear in the second chapter ‘Bérard’, which I will focus on in the remainder of this section. The aesthetic function will be the subject of the second and third sections.

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<sup>45</sup> Ibid., p. 21.

<sup>46</sup> Barthes, Roland, ‘There Is No Robbe-Grillet School’, trans. by Richard Howard, in *Critical Essays*, p. 91.

<sup>47</sup> Ricardou, Jean, *Problèmes du nouveau roman* (Paris: Seuil, 1967).

<sup>48</sup> Ricardou, Jean, *Que peut la littérature?* (Paris: L’Herne, 1965), p. 94, cf. Howells, *Sartre: The Necessity of Freedom*, p. 255.

<sup>49</sup> Ricardou, Jean, *Pour une théorie du nouveau roman* (Paris: Seuil, 1971).

<sup>50</sup> Britten, Celia, *The Nouveau Roman: Fiction, Theory and Politics* (Basingstoke: Macmillan, 1992), p. 190.

<sup>51</sup> Ibid., p. 190.

The dialogue form of ‘Bérard’ is a model of Badiou’s conception of how expression and meaning arise from language itself. The topic of the dialogue—between Bérard and Fréville—is the role of language in politics. To begin with, Bérard has a purely instrumental view of language; he believes that ‘THE MASSES HAVE THEIR LOGIC’ and that political statements ‘SLOWLY RAISE THE LEVEL OF THE STRUGGLE’ (A 57). Fréville, who has a taste for poetry, replies: ‘WHAT’S THE USE OF BEING A MAN OF LANGUAGE IF YOUR POLITICAL CONVERSATION STOPS AT THE LEVEL OF SLOGANS?’ (A 57). The discussion ends with agreement on a single point: ‘THERE IS SOMETHING TO SEE [IL Y A QUELQUE CHOSE A VOIR, sic]’ (A 68). Interspersed in the text between their speech in the dialogue leading up to this are fragments from one of Socrates’ concluding statements in *Cratylus*: ‘How to learn and make discoveries about the things themselves is probably too large a topic for you or me! But we should be content to have agreed that it is far better to investigate them and learn about them through themselves than to do so through their names.’<sup>52</sup> As we will see, Bérard and Fréville’s point of agreement is removed from this, and Badiou uses a device to distinguish speech from the fragmentary sequences of words which are not expressed.

The distinction of speech from what remains unsaid is summarized in ‘Pistes’, the appendix of reading instructions.

In small capitals: that which is actually said. In roman characters, a kind of verbal paste [*pâte*], that does not correspond to any real expression, even interior, but that symbolizes the implicit horizon over which the speech is removed. This horizon is either the subjective unconscious or the mechanisms of language itself, which are of exclusion as much as appearance, and leave at the back of the verbal trajectory a necessary furrow of silenced things, *determined* in their absence. I have not distinguished, as one might do, these two silent concretions of speech. What is most important is that the entire written noise *exists nowhere*. (A 307)

For example, regarding Dastaing’s enthusiasm for armed struggle, Fréville’s says ‘HE IS RIGHT’, which belongs to the disorder of a larger underlying concatenation: ‘HE oh no the other side of me bound I win IS RIGHT.’ (A 53)

For Badiou then, ‘expression’ is the act of pressing words out into the world from their inexistence in an underlying reserve of material. When it comes to explaining who or what decides the selection, Badiou is decidedly non-Sartrean in this excursion:

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<sup>52</sup> Plato, *Cratylus*, trans. C.D.C. Reeve, in *Complete Works*, ed. John M. Cooper (Indianapolis, Hackett: 1997), 439b.

speech acts are determined by ‘either the subjective unconscious or the mechanisms of language itself.’

Although the distinction of speech and its negative in ‘Bérard’ might seem to preserve the classical distinction of speech and narration (which still operates in Sartre’s early novels), it actually demonstrates the possibility of making direct speech exist out of a bricolage of material.

The ‘verbal paste’ against which speech is set is a mass of discontinuous writing with barely any punctuation. It includes excerpts from newspapers and a journal,<sup>53</sup> and fragmented passages from Rousseau’s *Confessions* as well as Plato’s *Cratylus* (the pieces of which are set in italics). In lieu of an introduction to the dialogue, the chapter begins with a breath-taking 640-word sequence of noise formed of abutting chunks. An example segment: ‘[...] a poet not naming a poet he substitutes language for being well “he substitutes language for being” do not substitute [...]’ (A 49). The level of deformation of this sequence is carefully measured. Well-formed words are its basic units (not letters) and (overlapping) chunks make some sense; However, punctuation and syntax at the level of the sentence is missing. This produces a dissolving aesthetic object: there is not even the continuity of an object in mutation. In this regard, Badiou goes further than Robbe-Grillet and effectively writes the disappearance of the aesthetic object. In an interview, Badiou recalled that when he was a student at the École Normale Supérieure, the *nouveau roman* ‘was in the background of literary controversies’, however it ‘was not received as a true revolution. Reading Robbe-Grillet, I always have the feeling of entering a work of enchantment, of poetry, unrelated to the technique defended by the author.’<sup>54</sup> More recently, in *Logics of Words*, Badiou remarked that: ‘Of all twentieth-century writers, Samuel Beckett is the one who has been my closest philosophical companion’; specifically, complementing Mallarmé’s influence of Badiou’s understanding of subtraction, ‘I owe Beckett a comparable sharpening of my thinking of generic truth, that is the divestment, in the becoming of the True, of all the predicates and agencies of knowledge.’ (LW 548, n. *V*)

Removed from the density of the verbal paste, the speech is relatively clear. The verbal style is informal and includes word games. The speakers often make use of secondary meanings; for example, when responding to Bérard’s claim that the masses

<sup>53</sup> For example, from *Le Monde* and *France Observateur* reporting political events in Paris and Algiers in December 1960 (A 52, 58), and from *Les Temps modernes* in June 1960 reporting the torture of Abdel-Kader Baccouche (A 59).

<sup>54</sup> Prasteau, Jean, ‘Alain Badiou (26 ans) “reprend les choses où Joyce les a laissées”’, p. 4, my trans.

have their own logic, Fréville says: ‘ALWAYS THE SAME MUDDLE [*SALADES*]’ (A 57) The following passage illustrates the type of word games Fréville likes to play:

- [Fréville] [...] LANGUAGE REMAINS YOUR SINGULARITY, YOUR NOBLE TITLE. WE ARE CONDEMNED, BECAUSE THAT IS THE FREE ROLE OF THE INTELLECTUAL, AT LEAST HERE, NOW, IN THE INEVITABLE ROTTING CARCASS CORTASE.
- [Bérard] SARTRE...
- [F] YES ... BUT WAIT, YOU CAN ALWAYS TRY TO PLAY THINGS, ‘LIKE THE WHOLE WORLD’, YOU WILL NOT RESIST AND YOU WILL NAME THEM, YOU WILL WRAP THEM IN YOUR PHRASE UNTIL YOUR DEATH. BEFORE YOU KNOW THEIR COLOUR. YOUR DEATH WILL NOT ESCAPE DISASTER. LANGUAGE WILL DECORATE YOUR DEATH, YOU WILL HAVE THE RIGHT TO FUNERAL CEREMONIES OF SPEECH, LIKE THE SWAN AND THE COOK, YOU KNOW, THE SWAN, IN LA FONTAINE [*LE CYGNE, DANS LA FONTAINE*]. DON’T BE PUT OFF, IT’S A RATIONAL ENSEMBLE, A PERFECTLY INTELLIGIBLE SYSTEM.’ (A 58)

For Fréville, even though death is inevitable man should choose to go down singing. Although unobtainable, the ideal is deliverance through speech. His metaphor being the swan of La Fontaine’s fable ‘The Swan and the Cook’, whose beautiful voice saves it from the pot: brandishing his knife, the cook refrains: ‘No, no, I’ll never cut the throat | that sings so sweet a note’.<sup>55</sup> To illustrate the point, Fréville offers an equivalence—*LE CYGNE, DANS LA FONTAINE*—whose ‘rational ensemble’ is a set of analogies which includes: ‘the swan in the fountain’ (literal reading); ‘the sign in La Fontaine’ (*cygne* and *signe* are homophones); ‘Joyce in La Fontaine’ (derived from Badiou’s note: ‘Joyce = Betelgeuse, Swan A’) (A 49, n. 1).

Although this passage includes a reference to Sartre, Fréville’s pessimism and confidence in the subversion of language is closer to Beckett. This attitude is adopted more generally in *Portulans*. Although the game of *Portulans* might seem to be of Sartrean inspiration—in the sense that it is a fictional example of the formation and dissolution of a group—Badiou develops it in a more Beckettian setting. In the prologue, regarding the oppressive state in which the novel is set, Badiou remarks: ‘*the exhausting cities and the stunted [rabougries] countryside of Cortase have always seemed to me to constitute a space of injustice*’ (P 12). The point, of course, is to persevere, despite the pessimistic prediction. Sartre was more straightforwardly an

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<sup>55</sup> La Fontaine, Jean de, *A Hundred Fables* (London: John Lane, 1900), p. 13.

optimist and declared himself ‘totally against’ Beckett’s pessimism.<sup>56</sup> In my view, Sartre underestimates Beckett on this point. I think Andrew Gibson is right to say that, in Badiou’s reading of him, Beckett represents unwavering faith in the potential to transform language and therefore grants ‘at least a kind of minimal credibility to the assertion, in the *Critique of Dialectical Reason*, that “man exists only in flashes”.’<sup>57</sup>

Between *Almagestes* and *Portulans*, the Beckettian theme of the instability of the name is also operative. As Cécile Winter has noted, Bérard, the loyal communist in *Almagestes* becomes an American employee in *Portulans*; and Dastaing, one-time flamboyant revolutionary, becomes a greyish union executive and government appendage after an unfortunate episode in Algeria.<sup>58</sup> In the postface of *Portulans*, Badiou summarizes his attitude towards the reversal of character identity between *Almagestes* and *Portulans*: ‘it was not in my project to outwardly deny this traditional operator of fiction, as has already been done by Beckett, the *nouveau roman*, not to mention the formalists of the *Tel Quel* group, who carried out this task with rigour and success. My attitude is of immanent subversion.’ (P 411)

I will now return to the point of agreement between Fréville and Bérard which subverts the Sartrean notion of something to say.

[F] ...SERIOUSLY, WHAT DO YOU THINK?

[B] THERE IS SOMETHING TO SEE.

[F] NATURALLY...

and I thank you do you know of your inverted cut of a grey-rose sky for his pleasure appointed under me *names* the ideal of becoming *the* communist representative

...PROPORTIONAL... (A 68)

As it is modelled in ‘Bérard’, the existence of ‘something’ in speech is the result of the expression of words from the ‘verbal paste’ into the world. Fréville’s qualification that what there is to see is ‘proportional’ is representative of the approach to expression modelled in the chapter. Expression is rendered visible in Badiou’s model and is ‘proportional’ in the sense of the ratio between parts of speech and the verbal paste from which those parts are removed. In other words, a character’s speech is proportional because it is their share of language. The implication is that a character’s speech is

<sup>56</sup> Sartre, ‘A Long, Bitter, Sweet Madness’, p. 62.

<sup>57</sup> Gibson, Andrew, ‘Badiou, Beckett and Contemporary Criticism’, in *On Beckett*, ed. by Alberto Toscano and Nina Power (Manchester: Clinamen, 2003), p. 136.

<sup>58</sup> Winter, ‘Les romans d’Alain Badiou’, p. 363.

determined by a function, whose existence is ‘visible and measurable *only in its “effects”*’,<sup>59</sup> to recall a famous phrase of Althusser’s. The statement ‘THERE IS SOMETHING TO SEE’ also indicates that expression is perceived but says nothing about its status in the imagination of the reader. Unlike Socrates’ concluding statement in *Cratylus*, which ‘inexists’ as italicized fragments in the verbal paste around it and from which it is removed (for example *names* and *the* in the passage quoted above), the statement ‘THERE IS SOMETHING TO SEE’ does not imply that it is possible to begin with the things themselves rather than words. As we will see in the next section of this chapter, ‘truth’ is not so much discovered in *Almagestes* as prescribed.

Finally, although Badiou shares Ricardou’s taste for prescriptive construction, *Almagestes* is not a theory of language: ‘The reflection on language does not play a theoretical role (others far exceed it in this respect), but a substantial one.’ (A 9). *Almagestes* does not teach us how to write, but it does provide us with a basic set of directions (‘Foreword’, ‘Pistes’, and footnotes) to read its logic of composition. In the foreword, Badiou acknowledges that, given the fragmentary nature of most of the text, following these directions will be a tormented experience: ‘if, readers, I call you “Antelopes”, it is because I make you run [*courir*], and in a desert.’ (A 9) The prescriptive dimension of *Almagestes* concerns the instructions in its marginalia that provide a thread for the reader to exit the labyrinth of possible interpretations and follow the interpretation that *Almagestes* itself prescribes.

To conclude this section, on the question of expression, *Almagestes* is structuralist. However, its mode of writing is designed such that the reader can always exit the labyrinth of polysemy and follow the reading prescribed in its marginalia, a short cut to the prescriptive message of the text and a sense of clarity that comes at a price: the reader’s freedom to use their own imagination.

#### THE PASSAGE OF A ‘TRUTH’

This section summarizes the way in which a spatial whole is achieved in the final chapter of *Almagestes*, and links this to Badiou’s later reflections on Wagnerian harmony and the idea of the ‘cosmos’ in Servero Sarduy’s prose.

In the final chapter, ‘La Première Vérité’ the setting of the book—a political demonstration in a quarter of Sannam called Orung—is clarified. There is a fold-out

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<sup>59</sup> Althusser, Louis and Étienne Balibar, *Reading Capital*, trans. by Ben Brewster (London: Verso, 2006) [1965], p. 180.

map of part of this district in which the action takes place at the end of the chapter, which, according to Walter Lewino, is ‘reconstructed from ancient parts of Toulouse’.<sup>60</sup> This relatively contained space includes military police, demonstrators, and observers and bystanders. The mass of the demonstrators includes organizations, left-wing politicians, union leaders, workers, and students. Within the polymorphous crowd individuals mention putting aside differences between socialists and communists for the sake of unity (A 258), and admit to uncertainty about how things will turn out (A 259).

We witness the action from the perspectives of four places in the neighbourhood: the terrace of the Hospital for the deaf and dumb, Rue Fabre, the junction of Rue du Pérou and Allée du Boulangrin, and the area surrounding l’Administration Centrale du Gaz. The descriptions from these locations have different styles, recalling the various excursions on language from the first eight chapters. Our attention is shifted from one place to another in a sequence that initially seems random.

However, there is an order behind these shifts and which determines the formal unity of the chapter. This sequence is the theme of faith from Wagner’s *Parsifal* which first appeared in Chantal’s diary:



(A 96)

In a later entry to her diary, Chantal transcribes the sequence of notes with marcato (^) in the treble stave into a seven-place sequence of four syllables, underneath which she writes a seven-place sequence of four numbers:

MI flat	LA flat	SOL	FA	MI flat	FA	SOL	
1	2	3	4	1	4	3	(A 118)

Badiou adds a footnote addressed to us: ‘Remember, antelopes, this succession: it directs an entire chapter (the last) of my book. It is the vigorous theme of Faith from Wagner’s *Parsifal*.’ (A 118)

My interpretation of this is the following: the syllable sequence is a variant of the tonic sol-fa, a pedagogical technique for teaching pitch and sight-singing to music students. Also, the translation into an ordered number sequence is typical of the set-

<sup>60</sup> Lewino, Walter, ‘Doit-on être Antilope?’, *France Observateur*, 724 (19 March 1964), p. 14, my trans.

theoretical formalization of music. A set-theoretical approach to musical composition first defines an unordered set of tones on the basis of which sequences are selected from the possible permutations of the combinations of these elements in ordered subsets. The basic set of Chantal's formalization of Wagner's theme of faith is  $\{1, 2, 3, 4\}$ , and the sequence 1, 2, 3, 4, 1, 4, 3 is a composition of two chains,  $\{1, 2, 3, 4\}$  and  $\{1, 4, 3\}$ . The order of the second chain, and therefore the seven-place number sequence is clearly not the 'natural' order of its basic set. Instead, this order is that of a map in a topology on the basic set. I will return to this in the next section when I discuss the topological aspect of Badiou's theory of aesthetic autonomy. In this sense, I think the underlying syntax of the final chapter is mathematical, and explains the book's title. The modern name of Ptolemy's treatise on the movements of stars and planets is derived from its Arabic translation as *al-majisṭī*. The title Ptolemy gave his work was *Mathēmatikē Syntaxis*.

Each of the numbers in the basic set of Chantal's formalization corresponds to one of the four places in the neighbourhood in which the action takes place in 'La Première Vérité'. 1 = the terrace of the Hospital for the deaf and dumb, 2 = Rue Fabre, 3 = the junction of Rue du Pérou and Allée du Boulangrin, and 4 = the area surrounding l'Administration Centrale du Gaz. The order in which we witness action at each of these places is determined by the sequence 1, 2, 3, 4, 1, 4, 3; in other words, the scene begins at the terrace of the Hospital for the deaf and dumb, then switches to Rue Fabre, then to the junction of Rue du Pérou and Allée du Boulangrin, and then the area surrounding l'Administration Centrale du Gaz, at which point, we go back to the terrace of the Hospital, and back to the area surrounding l'Administration Centrale du Gaz before finally concluding the sequence at the junction.

The text of 'La Première Vérité' is organized by this sequence. There are thirty-seven intervals in the chapter, and each is set at one of the four locations. The location is indexed by the first syllable of each interval, and therefore the syllable variant of the determining sequence—mi, la, sol, fa, mi, la, sol—is legible by scanning the chapter and reading only the first words of each interval. For example, the first interval begins with the word 'Minerve', the second with 'La', the third with 'Solidaire', and the fourth with 'Famineux' (A 253, 254, 255). The end of the sequence is marked with a word in capitals, for example, the seventh interval begins with 'SOLIQUE' (A 259). The first thirty-five intervals complete five cycles of the sequence. The thirty-sixth begins a sixth cycle with 'Minuter', however the thirty-seventh, which begins with 'Misère' stalls the mechanism and the chapter ends (A 301, 303). The first six intervals of each sequence



are ‘open’ in the sense that they are interrupted by the next one. This is especially clear in the segments which are left literally open-ended, such as the eighth, at the end of which the witness observing the formation of police forces from the terrace of the hospital is cut off: ‘No doubt it is a fake [*fausse*] manoeuvre, or perhaps a lack of coordination between the police forces and the elements of the 4th military division made available to the chief of police: they have barely installed the fork of their engine on the’ (A 261). The closure of the sequence at the end of the seventh interval is marked in capitals. For example, the seventh interval, which describes the polymorphous crowd, ends thus: ‘THE POLYMORPHOUS ENERGY OF A FUSION TOWARDS ITS THRESHOLD.’ (A 260)

Finally, there are four different ‘witnesses’ which correspond to the four locations, and each witness has a particular style of expression. In ‘Pistes’, Badiou tells us:

Each witness is particularized in a symbolic sense that is determined by very numerous formal rules (in the vocabulary, the cutting of phrases, the visual themes...). Very crudely, the first witness is the subject of scientific Knowledge [*le sujet du Savoir scientifique*] (for philosophers, the transcendental subject), the second is that of social inertia (serial man), the third that of aesthetic reproduction (the Image), the last that of commencing practice (fusion). (A 310)

These different styles are as follows. The language of the first witness (‘transcendental subject’ on the terrace of the hospital) is mostly descriptive and composed of short relatively clear sentences. This witness appreciates the effectiveness of the military police’s strategy and calculates the possible counter moves open to the crowd. The second witness (‘social inertia’ at Rue Fabre) is a bystander at street level, speaks colloquially, and is annoyed that the demonstration is inconveniencing business as usual: ‘what they doing trudging [*piétiner*] like that for two hours! Where d’ya put the car?’ This witness believes that politics is best left to the old representatives in parliament: ‘They are young. What do they have to do with politics at their age!’, ‘avoid civil war and preserve the republican institutions.’ (A 254, 262) The third witness (poetic at the junction) mingles with the crowd and produces fragmentary images of this experience in long profuse sentences full of metaphors and metonyms. The fourth witness (practical fusion in the area surrounding l’Administration Centrale du Gaz) reports dialogue between different individuals and groups in the crowd who decide to put aside their differences and unite against the oppression of the colonial state.

The immobilization of syllable sequence in the last two sections leaves us stranded on the terrace of the Hospital for the deaf and dumb. It also heralds the introduction of a more conventional novelistic style in which Badiou narrates the tragic end of the demonstration. The demonstrators become boxed in by the military police and ‘incredible slaughter’ ensues (A 302).

I will now clarify in three points the sense in which the structure of ‘La Première Vérité’ might be called, to anticipate Badiou’s later terminology, a ‘truth’. Firstly, it is one of many ‘truths’ because, in principle, any aesthetic fragment from the first eight chapters of *Almagestes* could be used to provide the form for an aesthetic whole. Secondly, the intervals of the chapter coexist in a single aesthetic object (the demonstration scene) by virtue of the coherence mapped by their sequence. Thirdly, this aesthetic object disappears when its order is destroyed by the existence of the thirty-seventh segment, which remains in the same place as the thirty-sixth. Crucially, this does not involve the introduction of any new elements, and therefore the ‘truth’ of *Almagestes* does not involve novelty. However, the other side of this is that the spatial order underlying ‘La Première Vérité’, which the seven-place sequence traverses, is, with the inclusion of 0, really an eight-place structure, and this anticipates the ‘novel’ structure of *Portulans*.

Badiou’s recent book *Five Lessons on Wagner* (2010)<sup>61</sup> is useful here to help us understand the broken totality of ‘La Première Vérité’, especially the fourth lesson, ‘Reopening “The Case of Wagner”’, in which Badiou argues for a certain renewal of Wagner against the volley of criticisms from Nietzsche, Mann, Adorno, and Lacoue-Labarthe. Badiou makes two points that help us understand the type of unity at stake in ‘La Première Vérité’. On the status of the whole in Wagner’s music and its relation to romantic harmony, Badiou describes Wagner’s music as ‘something detotalized and cracked, [...] this feeling we get of detotalized massiveness or a cracked sonic monument, which clearly can only be resolved by being destroyed.’ In addition, this resolution does not involve formal novelty. This is the crux of Badiou’s defence of Wagner from the accusation of ‘conservative revolutionism’,<sup>62</sup> which is allegedly due to the way it combines the idea (or ideology) and the spirit of the people: in one aspect, it is ‘backward-looking because it is pegged to the theme of a new mythology’; and in its

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<sup>61</sup> Badiou, Alain, *Five Lessons on Wagner*, trans. by Susan Spitzer (Verso: London, 2010).

<sup>62</sup> Ibid., p. 74.

other aspect it is said to be avant-garde, inventing a ‘new but overblown kind of sensuality [...] to keep the audience pinned to their seats, or to unite them’. Badiou’s counter argument attributes a Promethean cunning to Wagner:

There is a fundamental kind of craftiness about Wagner, which is in line with the French composer Barraqué’s remark to the effect that no creative inroads whatsoever were made in Wagner’s music as far as modifying musical language was concerned; there is merely a protracted, crafty practice of subjecting every difference to the finale, or what ultimately amounts to the production in the music of an equivalent of absolute knowledge as a resulting figure, as a terminal figure of discursivity.<sup>63</sup>

Badiou’s strategy is to turn insult into aid: how can Wagner be a conservative revolutionary, he asks rhetorically, if there is nothing new in his music? The specificity of Wagner’s music according to Badiou is the prolonged dissonance, in which suffering is expressed, before the harmonious climax—what Badiou evocatively characterizes as ‘a music of heartbreak.’<sup>64</sup> This does not mean that Wagner’s music is conservative either. Protracted dissonance within an overarching harmony is rather the precursor of Arnold Schoenberg’s ‘emancipation of the dissonance’.<sup>65</sup> In other words, Wagner’s music is the dramatization of tragedy as a precursor to novelty. Similarly, ‘La Première Vérité’ dramatizes the tragedy of the scenic act in the anti-novel: it shows how the *mise en œuvre* of an aesthetic form prescribes the collapse of the *mise en scène*. The difference is that the final chapter of *Almagestes* is the prelude to the novel *Portulans*, the form of which is classical.

The lesson of *Almagestes* is that the implementation of an aesthetic form includes the point from which construction inverts into destruction. This ‘truth’ is strictly allegorical and is independent from the representation of a political demonstration. This, as Rancière has pointed out, is a conception of the aesthetic that is close to Stéphane Mallarmé’s. In his little book on the poet, Rancière reminds us that Mallarmé opposed Wagner’s ‘fraudulent compromise’ between abstract musical language (what for Mallarmé was the authentic site of communion) and heroic

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<sup>63</sup> Ibid., p. 78.

<sup>64</sup> Ibid., p. 91.

<sup>65</sup> In ‘Opinion or Insight’ (1926) Schoenberg wrote that ‘the emancipation of dissonance [...] has placed the tonal centre of gravity in jeopardy (something already perceptible in Wagner).’ Cf. Schoenberg, Arnold, *Style and Idea: Selected Writings*, trans. by Leo Black and ed. by Leonard Stein (Berkeley: University of California Press, 1984), p.258.

mythology (epic representation)'.<sup>66</sup> And Rancière notes, against the Wagnerian nationalistic epic Mallarmé opposed a

'French spirit,' stamped by a specific poetics and politics: that is a Cartesian poetics of imaginative abstraction that refuses the enchantments of legend; and a revolutionary politics of justice that cuts into the course of history, decapitates kings and refuses, in their place, to have the people celebrate as a real body. The scenic act, like the modern political act has to be strictly allegorical, withdrawn from all embodiment of anonymous power.<sup>67</sup>

The representation of political action, albeit 'at a distance from the Algerian epic' (A 310) in 'La Première Vérité', then, is as incidental as the Wagnerian theme which orders it. What really matters is that this scene serves as the site of a disappearance of the aesthetic object. This has been the focus of Badiou's long-standing interest in formal aesthetics. The paradox, as Rancière identified with precision in an article in 2002, is this: 'Against every incarnation of the idea which would engulf it in sensible matter, Badiou wants to highlight the idea as pure subtraction, as the pure operation of the wholesale disappearance of the sensible. But he also wants to allow this subtraction to escape from every vanishing and let it remain as an inscription.'<sup>68</sup>

Finally, to conclude this section, it is important to understand why Badiou goes to such lengths to demonstrate this aesthetic principle in *Almagestes*. Why take your reader through eight chapters on the wastelands of language when the logic of the appearance and disappearance of the aesthetic object is only made visible in the last chapter? The answer, I think, is that it is necessary to show that the proliferations of language are based on an underlying emptiness, and that existentialist principle remains a profound influence despite the distance Badiou had otherwise taken from Sartre in 1964. Two of Badiou's more recent texts help us clarify this point: 'Void, Series, Clearing: Essay on the Prose of Severo Sarduy' (2000) and 'On the Prose of Natacha Michel' (2014).<sup>69</sup> Badiou's analysis of Sarduy's prose makes several points that could easily be said of *Almagestes*: the 'abstract complexity of the rules of composition' that define the 'baroque' discipline of his project, indifference to the laws of narration, the

<sup>66</sup> Rancière, *Mallarmé: The Politics of the Siren*, trans. by Steven Corcoran (London: Continuum, 2011), pp. 39–40.

<sup>67</sup> Ibid., p. 40.

<sup>68</sup> Rancière, Jacques, 'Aesthetics, Inaesthetics, Anti-Aesthetics', trans. by Ray Brassier, in *Think Again*, ed. by Peter Hallward (London: Continuum, 2004), p. 225.

<sup>69</sup> Badiou, Alain, 'Void, Series, Clearing: Essay on the Prose of Severo Sarduy', trans. by Bruno Bosteels, in *The Age of Poets*, ed. by Bruno Bosteels (London: Verso, 2014), pp. 183–193; Badiou, Alain, 'On the Prose of Natacha Michel', trans. by Bruno Bosteels, in *The Age of Poets*, pp. 147–169.

saturation of ‘an entirely *phrased* cosmology’, the allegorical use of incongruent phrases born of ‘predicative corruption’, ‘a totality entirely given over to the outside of prose, without depth or referent, but which [...] ends up acquiring the solidity of a thing’, and the exile of the writer from his own sentences.<sup>70</sup> The crucial point, however, is that ‘all this in the end serves only as the polymorphous support for a concentration of splendour’; in short, the tranquillity of ‘the cosmos’, which should be understood as ‘the complex name of the void.’<sup>71</sup> *Almagestes* then, makes grand detours because it is necessary to define a ‘cosmos’ of aesthetic material in order to think the complex unity of ‘a universal calm’.<sup>72</sup> As Badiou put it on his essay on Natacha Michel’s prose: ““Blank prose” is an abdication of thought; and from the notion that art—the art of prose—is precisely the thought of the sensible as such, it follows that in order to produce the idea of blank, as well as blankness itself, we need the total spectrum of colours in between.”<sup>73</sup>

#### THE AUTONOMY OF THE AESTHETIC

In this section, I will summarize Badiou’s conception of aesthetic autonomy in ‘The Autonomy of the Aesthetic Process’ (signed June 1965) which was published in July 1966 in the *Cahiers Marxistes Léninistes*, and show that on two points *Almagestes* exemplifies this type of autonomy. First, I will introduce the Althusserian context in which this article was published.

The *Cahiers Marxistes Léninistes* was founded by a group of young Althusserians from the Cercle d’Ulm including Robert Linhart, Jacques-Alain Miller, Jean-Claude Milner and Jacques Rancière in October 1964. From the beginning, it combined political and theoretical objectives: as members of the Union des étudiants communistes (UEC), the collective hoped to subvert its leadership away from the perceived Italian influence and towards the Chinese example, whilst advocating Althusserian Marxism.<sup>74</sup> The purpose of this journal was, as Yves Duroux has recalled, ‘to support what we called the “schools of theoretical training”’. These schools were set

<sup>70</sup> Badiou, ‘Void, Series, Clearing’, pp. 184, 186, 189, 191.

<sup>71</sup> Ibid., p. 190, 192.

<sup>72</sup> Ibid., p. 187.

<sup>73</sup> Badiou, ‘On the Prose of Natacha Michel’, p. 169.

<sup>74</sup> Chateigner, Frédéric, ‘From Althusser to Mao: Les Cahiers Marxistes-Léninistes’, trans. by Patrick King, *Décalages*, 1.4 (6 January 2016), 2–3. <<http://scholar.oxy.edu/decalages/vol1/iss4/6>> [Accessed 25 August 2017]

up in various universities in Paris, so as to disseminate more or less the positions you find in *Reading Capital*: they taught Althusser's Marx, the theory of revolution.<sup>75</sup> The point of this was to effect regeneration in the present. As Rancière put it in *Althusser's Lesson* (1974): "Theoretical training", instead of being the acquisition of knowledges with an eye to future transformation, could be the transformation of power relations in the present.<sup>76</sup>

Badiou's article appeared in number 12–13 on 'Art, Language: Class Struggle' at a point when a split within the original group of collaborators had recently occurred. The dispute was over issue 8 'The Powers of Literature' which was directed by Miller, and who, in his introduction to the issue, stressed the autonomy of literature: 'literature must be subjected to research which bears not on its effects but on its powers. Power: this concerns what literature can do on its own and upon itself'.<sup>77</sup> In the end, issue 8 was suppressed by Linhart and others, which led to the departure of Miller and Milner to concentrate their efforts on the more theoretical journal *Cahiers pour l'Analyse* which they founded in late-1965, and where they would re-publish the suppressed texts by Milner and Régnauld in 1967. Issue 12–13 also came after the *Cahiers Marxistes Léninistes* split with the UEC, following the resolution of the Central Committee of the Parti communiste français (PCF) at Argenteuil in the spring of 1966. The autonomy of art, the unsigned introduction to issue 12–13 stresses, is not that of the Argenteuil resolution, namely the 'petty bourgeois' freedom to think and write, but the seizure of 'artistic tools' by the masses themselves.<sup>78</sup> A Marxist-Leninist party, the introduction asserts, has 'on the basis of a theory of art', 'not only the right but the duty to develop an artistic politics. Cultural politics and not cultural management [*administration*]'.<sup>79</sup> The basic point is that the work of art expresses the historical reality in which it is produced but it is not a form of knowledge of that historical reality.<sup>80</sup> As an example the introduction speculates: 'If Mallarmé's poems are a dramatic ascent towards silence,

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<sup>75</sup> Duroux, Yves, 'A Philosophical Conjuncture: An Interview with Yves Duroux and Etienne Balibar' [Interview with Peter Hallward], in *Concept and Form*, II, 178.

<sup>76</sup> Rancière, Jacques, *Althusser's Lesson*, trans. by Emiliano Battista (London: Continuum, 2011) [1974], p. 46, trans. modified.

<sup>77</sup> Chateigner, 'From Althusser to Mao', p. 7.

<sup>78</sup> [Anon.], 'Introduction', in *Cahiers Marxistes-Léninistes*, 12–13 (July–October 1966), 3–7 (p. 7), my trans.

<sup>79</sup> *Ibid.*, p. 7, my trans.

<sup>80</sup> *Ibid.*, p. 6.

they are also expressive of his place in historical reality.’<sup>81</sup> The ‘cultural politics’ of the Marxist-Leninist party is not management (in the sense of imposing rules on production) but rather the critical evaluation of art works to clarify their expression of realities known to historical materialism. In order to do this, it is necessary to suppose that the essence of the artwork is irreducible to ideology.

In a provocative move, typical of the journal’s strategy of re-reading heretical Marxist texts, the issue includes Balibar’s ‘Marxisme et linguistique’,<sup>82</sup> a commentary on Stalin’s pamphlet *Marxism and the Problem of Linguistics* (1950).<sup>83</sup> What is retained from Stalin, is the notion that any truly autonomous realm is not reducible to a superstructure and therefore the real autonomy of art is irreducible to any ideological effects that artworks might include. It is in relation to the development of this point that Badiou’s text was included, since according to the introduction, it clarifies the principle of aesthetic autonomy against the ‘natural excesses’ of socialist realism.<sup>84</sup> Finally, issue 12–13 also came before Linhart formed the Union des jeunesses communistes (marxiste-léniniste) (UJC[ML]) and made the *Cahiers Marxistes Léninistes* its theoretical and political organ in late-1966. From issue 14 ‘The Great Proletarian Cultural Revolution’, which included amongst six anonymous texts ‘On the Cultural Revolution’ (attributed to Althusser),<sup>85</sup> the journal openly supported the Chinese Cultural Revolution and directly positioned itself against the PCF. As we will see in chapter 3, Badiou became an enthusiastic supporter of the victory of the communist idea in the 1970s only to admit the errancy of this project in the 1980s. Nevertheless, he remains faithful to ‘the Great Cultural Revolution, at any rate from 1965 to 1968.’ (CH 232)

The *Cahiers Marxistes Léninistes* was one of the various Althusserian circles in which Badiou was active from the late-1950s to the end of the 1960s. Althusser’s early, and lasting, influence on Badiou was to invite him to make a presentation on Lacan in his seminar on psychoanalysis in 1959, a presentation that was based solely on the

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<sup>81</sup> Ibid., p. 7, my trans.

<sup>82</sup> Balibar, Étienne, ‘Marxisme et linguistique’, *Cahiers Marxistes-Léninistes*, 12–13 (July–October 1966), 19–25.

<sup>83</sup> Stalin, J.V., *Marxism and the Problem of Linguistics* (Peking: Foreign Languages Press, 1972) [1950].

<sup>84</sup> [Anon.], ‘Introduction’, in *Cahiers Marxistes-Léninistes*, 12–13 (July–October 1966), 3–7 (p. 7), my trans.

<sup>85</sup> [Anon., attributed to Louis Althusser], ‘Sur la révolution culturelle’, *Cahiers Marxistes-Léninistes*, 14 (November–December 1966), pp. 5–16; trans. by Jason E. Smith as ‘On the Cultural Revolution’, *Décalages*, 1.1 (February 2010). <<http://scholar.oxy.edu/decalages/vol1/iss1/9>> [Accessed 25 Aug 2017]

essays Lacan had published in the journal *La Psychoanalyse*. Later, Badiou was also a member of the ‘Groupe Spinoza’ that aimed to rethink Spinoza’s metaphysics in the philosophical and political context of the late 1960s. Lead by Althusser, the group included Balibar and Macherey, and lasted from the summer of 1967 to the spring of 1969.<sup>86</sup> In the summer of 1968 and winter of 1969, Badiou published ‘Infinitesimal Subversion’ and ‘Mark and Lack’ in the *Cahiers pour l’Analyse*; and in May 1968 he presented the first installment of what he later published as *Concept of Model* (1969) in Althusser’s philosophy course for scientists.

The general argument of ‘The Autonomy of the Aesthetic Process’ is that the autonomy of art is irreducible to ideology because art is made from material that is already aesthetic. Autonomous art does not reflect an external reality: ‘the autonomy of the aesthetic process blocks us from conceiving it as *relation*.’ (AAP 35) Macherey’s analysis of aesthetic autonomy in ‘Lenin, Critic of Tolstoy’ (1965),<sup>87</sup> Badiou acknowledges, made a significant contribution to the development of its theory. In particular, Macherey’s analysis of ‘the exteriority of the formula of coherence proper to the system of novelistic subjectivity.’ (AAP 36) The limitation of Macherey’s conception of the aesthetic, however, is that it ‘affects ideology so to speak with an *outside* which is its inevitable *reversal*’ (AAP 34). By contrast, for Badiou:

Reversal [*retournement*], rigorously speaking, does not mean that the aesthetic process produces an effect of the presence of signification (the process, in this case, would work on ideological materials). *Reversal* means that the process produces an effect of signification of presence, with presence itself being an effect of the process. This is why the mode of production of reversal is *doubly* articulated: the effect of signification is *produced* just as much as the effect of presence. (AAP 36)

In other words, the aesthetic produces its own effects of signification and presence even if artworks often include elements which seem to be purely ideological, such as mimetic elements in paintings and universal statements literature.

In support, Badiou makes two subsidiary arguments regarding the nature of aesthetic material and the way in which it is processed. The former is more problematic than the latter. Badiou’s statement about the ‘raw material’ is this:

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<sup>86</sup> Peden, Knox, ‘Spinoza Contra Phenomenology: French Rationalism from Cavaillès to Deleuze (Stanford: Stanford University Press, 2014), p. 176.

<sup>87</sup> Reissued in Macherey, Pierre, *A Theory of Literary Production*, trans. by Geoffrey Wall (London: Routledge, 2006) [1966], pp. 117–133.



What the aesthetic process transforms is *differentially homogenous* to that which does the transforming. The ‘raw material’ of aesthetic production is already in itself aesthetically produced. The history of art thus possesses a regional autonomy. But this history by no means corresponds to the history of creators or their works. It is the theory of the *formation* and *deformation* of aesthetic generalities. (AAP 37)

Badiou goes on to specify an aesthetic generality is an aesthetic mode of production, not a type of art but an attitude that cuts across disciplinary borders such as figurative space, the tonal system, metric verse, and novelistic subjectivity, each of which is ‘an invariant and invisible structure that distributes ways of linking real elements in such a way as these elements can function as ideological.’ (AAP 38) The problem is rather with the status of the raw material itself, which is never properly defined in the text. In the concluding statements, Badiou mentions ‘real-imaginary elements’ and ‘real elements’ (AAP 38) but does not provide any further explanation. In the opening statements, Badiou does however specify that art is neither ideology nor science, even though ‘art is closer to science than to ideology. It produces the imaginary reality of that which science appropriates in its real reality.’ (AAP 32). What is missing is an account of how the underlying aesthetic structure—which is absent at the level of the visibility of the language effect it produces—has a materiality that is close to, but nevertheless different from that of the scientific signifier.

The argument for the immanence of the transformation process is more convincing. The two aspects of this process are the operators of transformation (presence-effect) and material transformed ‘by the place prescribed to them by the operators (effect of signification).’ (AAP 38) Badiou’s statement on this is worth quoting at length:

the structural reality of the mode of production lies in the mechanism by which the first “encounter” the second. Indeed, the operators are nowhere given other than in the elements, since the structure as such is invisible. There is thus a vectorial, or oriented, reality to the process of production: one can figure it as a “field” in which are *distinguished* two hierarchical regions. One is the region of operators, the other the region of thematic elements. But the operators are themselves thematic so that their presence in the structured field is simply given as the encounter, or *double function*, the characteristic asymmetry that makes it such that first function renders possible the second, according to a rule (the visible *i*) that is the structure itself. (AAP 38–39)

To understand the ‘vectorial reality’ of the aesthetic process underlying its regulated appearance (‘*i*’), Badiou cautiously notes, ‘[w]e could make use of a topological

comparison.’ (AAP 38) The key idea is that the production of a ‘field’ of marks by the aesthetic process is analysable in terms of intervals: ‘the “same” interval [*intervalle*] can be considered either as open (a, b) or closed [a, b].’<sup>88</sup> (AAP 38) Like the mobile stakes (*valli*) used by Romans to build palisades and establish temporary fortifications, the borders of an interval in an aesthetic work contain a space that is fundamentally open. Although a statement in a literary work may seem to have the form of a universal statement and therefore appear to be a closed interval, this is merely its ideological appearance not its underlying aesthetic form, which is that of an open interval: ‘a separable statement enters into the homogeneity of the aesthetic process only if it is *open*, in the sense that it is *closed* but *no longer contains its closure*.’ (AAP 38) In a text, what is at stake are its ‘syntactical anchors’; the logical conjunctions or disjunctions, such as ‘and’, ‘thus’, or even the silent gesture of Stepan Trofimovitch’s ‘bow’ to Vervara Petrovna in the scene Badiou quotes from *The Demons*. The chain of syntactical anchors in an aesthetic work constitutes its logic: the interval between any pair of anchor points in a text can be opened up by another anchor point outside that interval, all the way to the total set of anchor points of the text as a whole.

In Badiou’s example from *The Demons*, Stepan’s bow is the external aesthetic point which opens, and thereby reverses the apparently ideological statement about the truth of grief which is contained by the anchors ‘and’ and ‘thus’. Furthermore, the closed interval of the work’s empirical existence is, in its aesthetic reality, an open interval of the aesthetic as a whole. In short, the function of the aesthetic can be expressed as the formula  $E(e)$ , where  $E$  is the operator and  $e$  the set of thematic elements.

I will now demonstrate two points on which *Almagestes* exemplifies this conception of aesthetic autonomy. As an aesthetic work, *Almagestes* cannot be expected to clarify the problematic status of aesthetic material: it presents us with the visible effects of a determined aesthetic process. However, it does include several figures of the process outlined above, and teaches its readers how to recognize them. In addition, the underlying structure of ‘La Première Vérité’ is a topology: its structure is an analogous to the topology on the basic set of Chantal’s formalization of Wagner’s theme of faith.

The aesthetic process is figured throughout *Almagestes* through the following technique: extract an interval from an existing aesthetic work, cut it into smaller parts

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<sup>88</sup> I have adopted the standard use of brackets for open (a, b) and closed [a, b] sets over the notation used in ‘The Autonomy of the Aesthetic Process’ ]a, b[ and [a, b].

which break the signification effect of the original interval, and then embed these fragments in the verbal paste of a new construction. The chapter ‘Bérard’ includes two examples to which I have previously referred and I will now show one of these in more detail.

At the beginning of ‘Bérard’, a passage from Rousseau’s *Confessions* is used to figure the re-aestheticization of already produced material. The quoted passage from Rousseau is the one in which the author recalls spending a particularly happy night under the stars when sleeping rough outside Lyon. In the following, Rousseau’s passage can be read by scanning the italicized segments:<sup>89</sup>

Not the beautiful passage on the terraces where more gasp  
*I even remember having passed a delightful night outside the city on a path that skirted the  
 Rhone or the Saone, I do not recall which. Gardens rising in terraces bordered the path on  
 the opposite side. It had been very hot that day, the  
 evening was charming; the dew moistened, grass  
 withered; no wind at all, a tranquil night; the air was cool without being cold; the sun  
 shone on its alpillles chain of locusts she told me you are beautiful like a gold insect not her  
 breast came to brush against until  
 billowing sails I look at  
 the sun, after setting, left in the  
 sky red vapour the reflection of which coloured the water pink; the trees of the terraces  
 there was therefore that day through pistil foliage memories  
 were filled with nightingales who were responding to each other. I strolled in a sort of  
 ecstasy, abandoning my senses and my heart to the enjoyment* you  
 crush me latest beauty her dress sprays fire of the thick grass she  
*Absorbed in my sweet reverie I prolonged far into the night my stroll my stroll that gasp*  
 [...] (A 51)

If it were quoted intact, the passage from Rousseau’s *Confessions* would simply be an example of ideological material: the reflection of part of a given object, and, moreover, that of an author’s reminiscence of a lived experience. However, in the form in which it appears above, it is opened in two ways. It is submerged in the verbal paste of the chapter, and this reversal is marked by exclamations—the two gasps in the verbal paste. Openings are also introduced within it: six cuts divide it into seven sub-intervals, which

<sup>89</sup> Rousseau, Jean-Jacques, *The Confessions and Correspondence, Including the Letters to Malesherbes*, trans. by Christopher Kelly, ed. by Christopher Kelly, Roger D. Masters and Peter G. Stillman, *The Collected Writings of Rousseau*, 14 vols (Hanover: University Press of New England, 1995), V, 141–2, trans. modified.

are marked by line breaks, and into three of these babble is inserted to subvert the meaning of the original. Finally, it should be noted that this figure of the immanence of the aesthetic process is presented in the verbal paste from which the dialogue of Bérard and Fréville is removed. As such, this background ‘noise’ not only represents the absence underlying this dialogue, but also the notion that there is a single horizon to all aesthetic works.

I will now explain how the underlying structure of ‘La Première Vérité’ is a topology. The coherence of the intervals of ‘La Première Vérité’ is assured by its syntactical anchor points—the syllables from Chantal’s transcription of Wagner’s theme of faith which mark the beginning of each interval. However, the syllable sequence is not the underlying structure since the syllables Mi, La, Sol, Fa are its representatives in the determined text. As we saw in the previous section, Chantal provided a double translation of Wagner’s theme of faith, and it is the other version—the number sequence—which is not visible in ‘La Première Vérité’, and which is determinant and prescribes a topological syntax to the chapter.

The demonstration that this number sequence is a topology is technical but short. We recall that this sequence is composed of two sets of numbers  $\{1, 2, 3, 4\}$  and  $\{1, 4, 3\}$  that are subsets of the basic set of the sequence  $\{1, 2, 3, 4\}$ . We will call the basic set  $X$ . A topology on  $X$  is a collection  $\tau$  of open subsets of  $X$ . Now, it is a fact that one of the topologies on  $X$  is the collection  $(\ ), (1, 2, 3, 4), (1, 4, 3)$ . The void  $(\ )$  is an open set and is included in every topology. Therefore, the two sets which comprise the sequence 1, 2, 3, 4, 1, 4, 3 plus the void are a topology on  $X$ . One further step is required to understand the importance of this. The order of the number sequence matters. This is because it prescribes the movement—or what Badiou calls the ‘vectorial reality’ in ‘The Autonomy of the Aesthetic Process’—in which we experience the demonstration scene and therefore the order in which its topology is traversed. This sequence of steps can be represented with arrows like this:  $1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 1 \rightarrow 4 \rightarrow 3$ . Now, we know that this sequence repeats five times in ‘La Première Vérité’, which implies the existence of a recurrence function which maps  $3 \rightarrow 1$  to restart the same sequence. However, we also know that this does not always happen since the last two intervals represent the identity function  $1 \rightarrow 1$ . The mere existence of this step does not merely change the order in which the topological space is traversed, it effectively dissolves the order previously defined on  $X$ . This is because no matter how the sequence continues from this point onwards, we know that its first interval is  $1 \rightarrow 1$ , which is not a part of the previous

order. Finally, this also means that in this conception of aesthetic autonomy, nothing guarantees that the same order will repeat.

To conclude this section and this chapter, not only does *Almagestes* exemplify the type of autonomy defended in ‘The Autonomy of the Aesthetic Process’, ‘La Première Vérité’ also clarifies the double role of chance in the process: as the ‘encounter’ between the operator (Wagner’s theme of faith) and thematic elements (the witness accounts of the demonstration), and also as the random dissolution of the operator itself in the final interval. Ultimately, this conception of the aesthetic remains closer to the purely allegorical form of Mallarméan truth than to the political commitment of *Cahiers Marxiste Léninistes* 12–13 (the seizure of the tools of aesthetic production by the masses themselves). Nevertheless, like the *Cahiers Marxiste Léninistes*, the two volumes of *Trajectoire inverse* have a pedagogical attitude towards the use of aesthetic works. As Badiou reminds us in the postface of *Portulans*, a ‘portulan’ is an ancient maritime map whose use depends upon knowledge of its ‘conventional signs’ (P 414). Like the foreword, postfaces, notes and asides in *Almagestes*, *Portulans* provides a summary of the ‘knowledge’ that ‘the complete reading of *Portulans*’ presupposes (P 414). Unlike the pedagogical dialogue in which the slave demonstrates the universality of a mathematical proof in Plato’s *Meno*, the instruction that readers of *Almagestes* and *Portulans* receive in marginalia makes it possible to see the underlying logic of the texts when the chances of deducing this independently are slight. Ultimately, the lesson is Platonic: the aesthetic is a law unto itself and its rule can either be disclosed at its margins or else recognized by chance.

## Supplementing Althusserian Theory with Set-Theoretical Structure

This aim of this chapter is to demonstrate how Badiou's reading of Althusser's early theory purifies scientific discourse and to explain why the application of this in politics is limited.

I privilege 'The (Re)commencement of Dialectical Materialism' (1967) in the first two sections of this chapter. Although published as a review of Althusser's theory, it goes beyond this remit by recommending a set-theoretical approach to the questions of the autonomy and the univocity of scientific discourse, and presenting an incomplete formalization of this interpretation. I will not investigate here whether this could be strengthened and completed, instead—and this is the main aim of the first section—I will demonstrate that Badiou treats Althusser's discourse as if it were an axiomatic logical system. This interpretative approach simply disqualifies aspects of Althusser's theory that do not conform to the conventions of formal logic (most obviously, contradiction). The specific distortion of Althusser's theory that results from this is visible through comparison of the privileged set of Althusser's statements in Badiou's presentation and the context of these statements in Althusser's texts. The presence of contradictions in Althusser's discourse determines the partiality of Badiou's interpretation in advance—even in the austere mode of interpretation of axiomatic representation a reading is always a reading amongst others. I make use of 'The Autonomy of the Aesthetic Process' (1965), 'Mark and Lack' (1969)<sup>1</sup> and 'Infinitesimal Subversion' (1968)<sup>2</sup> to clarify how this interpretation is consistent with Badiou's hyper-Althusserianism. In the short second section I outline Badiou's distinctively

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<sup>1</sup> Badiou, Alain, 'Marque et Manque: à propos de Zéro' [January 1967], *Cahiers pour l'analyse*, 10 (Winter 1969), 150–173. Trans. by Luke Zachary Fraser and Ray Brassier as 'Mark and Lack: On Zero', in *Concept and Form*, vol 1, ed. by Peter Hallward and Knox Peden, pp. 159–185.

<sup>2</sup> Badiou, Alain, 'La subversion infinitésimale', *Cahiers pour l'analyse*, 9 (Summer 1968), 118–137. Trans. by Robin Mackay and Ray Brassier as 'Infinitesimal Subversion', in *Concept and Form*, vol 1, pp. 187–207.

mathematical approach to structure, and in the third section I discuss the limits of Badiou's approach in *Concept of Model* (1969).

#### BADIOU'S READING OF ALTHUSSER

In 'The (Re)commencement of Dialectical Materialism', the question of the theoretical status of dialectical materialism is posed with reference to Althusser's '*theory of discourse*' (RDM 146), in which all discourses are categorised according to the simplistic science/ideology binary which Althusser accepted from Marxist-Leninist doctrine. Badiou does not question the suggestion that Marx's 'philosophy' is the general epistemology of Marxist sciences (the 'regional' epistemologies of economics, anthropology, politics, and history). This doctrine stems from the positivist interpretation of Marx and Engels' distinction between 'materialist method' and ideology in *The German Ideology*. However, this schema has little in common with the position Marx and Engels actually took in *The German Ideology*, namely that ideology misrepresents society in the interest of the dominant class, and that German philosophy (especially Hegel's) was the German ideology of the mid-1840s because it misrepresented German society in the interests of the German bourgeoisie. Against this, they proposed that knowledge of the 'material conditions' of society is the first premise of the 'materialist method',<sup>3</sup> which they believed would empower the emerging proletariat without the illusions of bourgeois philosophy. Later, Engels introduced the term 'scientific socialism', which encouraged the positivist interpretation of the 'materialist method' as science.<sup>4</sup> A further problem with the positivist schema is that Marx did not use the term ideology after 1852, because he recast its problematic as 'commodity fetishism' in *Capital*.<sup>5</sup> This shift opened up two new lines of enquiry which Balibar has summarised as follows: 'on the one hand, the idea of the *reification* of the bourgeois world in the forms of the generalised "commodification" of social activities; on the other, the programme of an analysis of the *mode of subjection* implied in the process of exchange, which finds its ultimate expression in structural Marxism.'<sup>6</sup>

<sup>3</sup> Marx, Karl and Friedrich Engels, *The German Ideology*, trans. and ed. by C.J. Arthur (London: Lawrence & Wishart, 1974), p. 42.

<sup>4</sup> Balibar, Etienne, *The Philosophy of Marx* (London: Verso, 2007) p. 54.

<sup>5</sup> Ibid., p. 42.

<sup>6</sup> Ibid., p. 56.

Althusser's treatment of the science/ideology pair is not positivist because the couple is prioritized over either of the terms (RDM 146). As Badiou explains, the combination of these terms is 'not distributive' (in the mathematical sense) since they cannot be divided up and their order matters. As such, the couple are not clearly divided like the classical norm truth/error, and consequently, it is not possible 'to immediately classify different practices and discourses, even less to "valorise" them abstractly as science "against" ideology.' (RDM 147, trans. modified). What Badiou does not mention is that this impurity is necessary to Althusser's strategy of symptomatic reading, whose interpretative method 'divulges the undivulged event in the text it reads, and in the same movement relates it to *a different text*, present as a necessary absence of the first.'<sup>7</sup> Badiou's strategy is to nevertheless demonstrate that it is possible to think the pure autonomy of science whilst maintaining a strict distance from positivism. In the third section of this chapter we will see how his formalist position is clearly distinct from logical positivism.

To begin, and before I discuss his axiomatization of Althusser's theory, I will clarify three points on which Badiou's reading of Althusser is decisive.

The first is that Badiou affirms the theoretical difference between Marx and Hegel which 'the variants of vulgar Marxism' efface (RDM 137). Badiou's wager is that an exit from 'the tyranny of Hegel' is possible via 'the difficult allegorical figure' of 'Kant *within* Spinoza' (RDM 138, 170); specifically, that the Hegelian concepts of totality and negativity can be refuted by thinking regional epistemology in terms of 'the Kantianism of the multiple' and general epistemology as 'the Spinozism of causality' (RDM 170). In 'Mark and Lack', Badiou divulges what really underlies this attack on the anxious philosophical 'figure of Being gnawing at itself': allegiance to Spinoza and Lautréamont's enthusiasm for mathematics; the belief that 'science will always torment philosophy' with its demonstrations of the formal 'self-sufficiency' of the multiple 'in which even lack is not lacking'.<sup>8</sup>

The standard Hegelian-Marxist objection to Althusser's reformulation of the Marxian dialectic is that it is not a theory of social transformation because its purely analytical modelling of conjuncture is at best a place-holder for the temporal standpoint of political subjects.<sup>9</sup> However, by no means does this mean that Althusser's theory is

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<sup>7</sup> Althusser and Balibar, *Reading Capital*, p. 28.

<sup>8</sup> Badiou, 'Mark and Lack', pp. 173–174.

<sup>9</sup> Osborne, Peter, *The Politics of Time* (London: Verso, 1995), p. 28.



disengaged. The ‘anti-’ of his anti-empiricism, like the ‘anti-’ of his anti-Hegelianism marks an impure break. While it is true that, for Althusser, ‘the production of knowledge which is peculiar to theoretical practice constitutes a process that takes place *entirely in thought*’, this knowledge is also a ‘model’ or ‘*technical instrument*’ when empirically applied in political practice.<sup>10</sup>

In *Reading Capital*, the ‘practical application’ of a model is opposed to what Balibar, in ‘The Basic Concepts of Historical Materialism’, calls ‘the empiricist tendency to think the theoretical object of an abstract science as a mere “model” of existing realities’.<sup>11</sup> Althusser specifies: ‘The empiricism of the model is then in its place, at home, not in the theory of knowledge but in practical application.’<sup>12</sup> Althusser’s example is ‘the technical practice of planning in the socialist countries.’ This concept of model as a *technical instrument* is indebted to Bachelard’s notion of phenomenotechnics, in which the epistemological object materializes in the course of an experiment. In Althusser’s words, ‘the utilization of Theory is not a matter of *applying* its formula (the formula of the dialectic, of materialism) to a pre-existing content’ but rather of anticipating the ‘formal conditions’ of a theoretical practice.<sup>13</sup>

For Frederic Jameson, this approach is limited, ‘since for Althusser real historical time is only indirectly accessible to us, action for him would seem to be a blindfolded operation, a manipulation at distance, in which we could best watch our own performance indirectly, as though in a mirror, reading it back from the various readjustments of consciousness which result from the alteration in the external situation itself.’<sup>14</sup> However, the other side of this is that, in principle, at least, Althusser is committed to the direct intelligibility of the dialectic, and even though the results of its application in practical realms are unpredictable, the decision to act is made from a point of theoretical clarity. I agree with Jerzy Kmita that this is a ‘total instrumentalism’ in the sense that ‘all facts stated by science have the character of instrumental-theoretic constructs’.<sup>15</sup>

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<sup>10</sup> Althusser and Balibar, *Reading Capital*, pp. 42, 39 n. 17.

<sup>11</sup> Ibid., p. 207, n. 5.

<sup>12</sup> Ibid., 39, n. 17.

<sup>13</sup> Althusser, Louis, *For Marx*, trans. by Ben Brewster (London: Verso, 2005) [1965] p. 170.

<sup>14</sup> Jameson, Frederic, *The Prison House of Language* (Princeton: Princeton University Press, 1972), p. 108.

<sup>15</sup> Kmita, Jerzy, *Problems in Historical Epistemology*, trans. by Michael Turner (Dordrecht: Reidel, 1988) [1980], p. 171.

In Althusser's total instrumentalism, Lenin's aphorism 'without a revolutionary theory there can be no revolutionary movement',<sup>16</sup> not only means that 'theory is essential to practice' in the sense that revolutionary practice is 'based on' theory, but also more generally that dialectical materialism is the essence of historical materialism.<sup>17</sup> It is in relation to this point that, in 'On the Materialist Dialectic', Althusser poses the question of the 'exact theoretical expression' of 'the Theory of practice in general—the materialist dialectic'.<sup>18</sup> The problem, though, is that this implies that there is a materiality to thought itself, and therefore begs the question: how is thought materialized *as thought*? Althusser provided no answer to this, although the posthumous publication of the texts included in *The Humanist Controversy* do show that between 1965 and 1968 Althusser was hoping that a Lacanian inspired logic of the signifier would fill this gap.

Althusser was confident that the solution to this problem '*already exists in Marxist practice*', and he therefore read *Capital* as if it contained the secret of dialectical materialism.<sup>19</sup> Althusser's quasi-structuralist reading of *Capital* presumed that the organisation of its concepts was an effect of what he called the 'structural causality' of dialectical materialism, by which he meant 'a cause immanent in its effects in the Spinozist sense of the term, that *the whole existence of the structure consists of its effects*, in short that the structure, which is merely a specific combination of its peculiar elements, is nothing outside its effects.'<sup>20</sup> This approach was based on the notion of 'metonymic causality' which Jacques-Alain Miller set out in 'Action of the Structure', a text Miller shared with Althusser in 1964 prior to its publication in the *Cahiers pour l'Analyse* in 1968. This reading strategy attempts to disclose how the subjective experience of reading a text is determined by the underlying activity of a *structuring structure*. The presumption is that, although the structuring structure is invisible to a literal reading, a symptomatic reading can identify points of inconsistency or lapses in the text (metonymic substitutions) which reveal the mechanism of its production.

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<sup>16</sup> Lenin, Vladimir, 'What Is to Be Done?: Burning Questions of Our Movement' [1907], trans. by Lars T. Lih, in *Lenin Rediscovered: What Is to Be Done? in Context* (Chicago: Haymarket, 2008), p. 696.

<sup>17</sup> Althusser, *For Marx*, pp. 166, 168.

<sup>18</sup> *Ibid.*, p. 169.

<sup>19</sup> *Ibid.*, p. 165.

<sup>20</sup> Althusser and Balibar, *Reading Capital*, p. 189.

In ‘The Autonomy of the Aesthetic Process’, Badiou initially expressed scepticism towards this notion of structural causality, suspecting it to be a masquerade of formalism:

The theory of structural causality is still very obscure. My impression is that such a theory is impossible, if one pretends to provide it with formal models. It is to be feared that only regional theories are possible. From this point of view, and different from Althusser, I fear grave difficulties in the ‘passage’ from historical materialism to dialectical materialism. (AAP 39, n. 16.)

For Badiou, the problem is that the analysis of structural causality through interpretation of apparent glitches in the appearance of a given object (in this case, the classic text of historical materialism) will, at best, approximate the mechanism behind metonymic displacements in that text, and this is not the same as specifying the mechanism of structural causality in general. The alternative is to assume that structural causality operates axiomatically, i.e. that on the basis of a set of axiomatic statements, it is possible to construct a formal theory. This is precisely the approach that Badiou pursued two years later in ‘The (Re)commencement of Dialectical Materialism’. Furthermore, he indicated the mathematical nature of this fundamental discourse: ‘There must exist a *previous* formal discipline, which I would be tempted to call the *theory of historical sets*, which contains *at least* the protocols of ‘donation’ of the pure multiples onto which the structures are progressively constructed.’ (RDM 163)

Clearly, Althusser’s own approach to mathematics was an obstacle. Badiou overrules Althusser’s ‘subordination of mathematics to a non-mathematical conceptualisation’ underscoring ‘the latent danger of a certain “Aristotelianism” in Althusser, a movement that is more organic than mathematical.’ (RDM 167, n. 62) Badiou’s realism of forms (what mathematicians often call ‘Platonism’) is already active here and will take centre stage in *Being and Event* twenty years later. Regarding ‘the *theory of historical sets*’, Badiou says:

*Althusser thinks he can do without it.* His entire effort is geared towards actualising right from the start, for a discipline without tradition, what mathematics is at pains to obtain through the emerging theory of categories: a *direct* determination of the concept of structure that bypasses the underlying presence of a set. I believe for my part that epistemological prudence for the time being imposes a ‘classical’ formalisation (RDM 166).

From a technical point of view, it is the set theoretical ‘protocols of donation’ that Badiou is interested in: the axiomatic procedure which prescribes membership to a set.

This mathematical principle is Badiou's scientific alternative to the '*unifying pressure*' of imaginary representation (RDM 149).

The second point concerns the status of the subject. Badiou approached the cross-fertilisation of psychoanalysis and Marxism with considerable scepticism, especially regarding the notion of a subject of science. In 'Mark and Lack' (signed January 1967) he emphatically declared, '*there is no subject of science.*'<sup>21</sup> Four months later, he added: 'Lacan's most recent speculations on the subject of science should not disguise for us that, for Marxism, the subject is a *properly ideological* notion.' (RDM 147, n. 24) This is a reference to 'Science and Truth'<sup>22</sup>, which Lacan first presented in his seminar at the École Normale Supérieure in the autumn of 1965, and published in January the following year in the first volume of *Cahiers pour l'Analyse*. In this article, Lacan claims there is a constitutive subject of science, which only psychoanalysis has the tools to treat. Science, Lacan asserted, 'has no memory. Once constituted, it forgets the circuitous path by which it came into being; otherwise stated, it forgets the dimension of truth that psychoanalysis seriously puts to work.'<sup>23</sup> 'Science and Truth' outlines the two key elements of the distinctive Lacano-Althusserianism advanced by the young editorial collective of the *Cahiers pour l'Analyse* (especially Jacques-Alain Miller and Yves Duroux): 'An economic science inspired by *Capital* does not necessarily lead to its utilisation as a revolutionary power, and history seems to require help from something other than a predicative dialectic.' That, together with the proposition 'modern logic [...] is indisputably the strictly determined consequence of the attempt to suture the subject of science'<sup>24</sup> is the point of departure of Miller's important 'Suture (Elements of the Logic of the Signifier)', also published in the first volume of the *Cahiers pour l'Analyse*.

Badiou's remark about the subject of science in 'The (Re)commencement of Dialectical Materialism' was the first published statement of the position that Althusser had privately shifted to in 1966. The posthumously published 'Three Notes on the Theory of Discourses', which Althusser circulated in a close circle of collaborators (Badiou, Balibar, Duroux, and Macherey) in October 1966, was the first exchange of

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<sup>21</sup> Badiou, 'Mark and Lack', p. 171.

<sup>22</sup> Lacan, Jacques, *Écrits: the first complete edition in English*, trans. by Bruce Fink in collaboration with Héloïse Fink and Russell Grigg, ed. by Jacques-Alain Miller (New York: Norton, 2006) [1970], pp. 726–745.

<sup>23</sup> *Ibid.*, p. 738.

<sup>24</sup> *Ibid.*, p. 731.

‘research notes’ towards a collective work provisionally titled ‘Elements of Dialectical Materialism’.<sup>25</sup> In this text, Althusser calls for the further development of the Lacanian logic of the signifier (what Althusser called ‘the general theory of the signifier’)<sup>26</sup> and clarification of its articulation with ‘the general theory of historical materialism’.<sup>27</sup> He believed that the general theory of general theories, ‘the philosophy that “works” in the general theories—that is dialectical materialism—would, without any doubt, derive from this the means to emerge and expand.’<sup>28</sup> Crucially, in the cover letter attached to the notes, Althusser admitted: ‘I believe that everything that I have said about the place of the “subject” *in every one of the discourses must be revised*.’<sup>29</sup> Althusser would not follow the direction of Lacan’s ‘Science and Truth’, he decided that the subject is essentially ideological:

I think that the category of the subject is absolutely fundamental to *ideological* discourse, that it is one of its central categories: it is bound up with the *truth-guarantee* in the centred, double mirror structure. Drawing on the consequences of this ‘pertinence’, I do not think it is possible to talk about a ‘subject’ of the unconscious, although Lacan does, or of a ‘subject of science’, or of a ‘subject of aesthetic discourse’—*even if* certain categories of the discourses in question do bear a relation to the category of the *subject*, inasmuch as all are articulated with ideological discourse, each in a specific way.<sup>30</sup>

In ‘The Historical Task of Marxist Philosophy’, another posthumously published text that Althusser circulated in May 1967 (the month Badiou published his review), Althusser drew a strict line of demarcation between ‘objective’ science and ‘subjective’ ideology:

An ideology is a *distorted* representation of reality: it is *necessarily* distorted, because it is not an objective but a *subjective* representation of reality—let us say, for the sake of brevity, a social (class) representation of reality. Science, in contrast, exists only on condition that it struggles against all forms of subjectivity, class subjectivity included [...] science is objective.<sup>31</sup>

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<sup>25</sup> Althusser, Louis, ‘Three Notes on the Theory of Discourses’, in *The Humanist Controversy*, trans. by G.M. Goshgarian and ed. by François Matheron (London: Verso, 2003), p. 37.

<sup>26</sup> *Ibid.*, p. 64.

<sup>27</sup> *Ibid.*, p. 68.

<sup>28</sup> *Ibid.*, p. 69.

<sup>29</sup> *Ibid.*, p. 37.

<sup>30</sup> *Ibid.*, pp. 37–38.

<sup>31</sup> *Ibid.*, p. 191, n. *h*.

Two years later, in 'Lenin before Hegel', Althusser finally clarified his position in publication: 'history is a process *without a subject*'.<sup>32</sup> In principle, there could be no subject of science, he asserted, because this would leave open the possibility that the general theory of historical materialism is Hegel's logic.

The third point is that Badiou's purification of science is classical because it restores the principle of non-contradiction. In 'The (Re)commencement of Dialectical Materialism' Badiou rejects contradiction as he prepares for his mathematical interpretation of Althusser's theory:

In the texts of *For Marx*, out of lingering respect for tradition and so as better to find support in a famous text by Mao, Althusser still calls the articulated practice a *contradiction*. We resolutely abandon this confused designation. (RDM 154, n. 40)

This note is attached to Badiou's axiom of 'instance' of a social formation: 'Let us agree to call *instance* of a social formation a practice *such as* it is articulated onto all the others.' (RDM 154) Clearly, Badiou's rejection of contradiction is a condition of possibility for his axiomatic interpretation because mathematics excludes contradictory material. Badiou makes this clear in 'Mark and Lack', asserting: 'Science is the veritable archi-theatre of writing' and works 'on the basis of an inaugural confidence in the permanence of graphemes [*graphies*]'.<sup>33</sup> Non-self-identity of graphemes is 'unthinkable' because such 'shimmering of its self-differing, would suffice to annihilate the scriptural existence of the entire calculus'.<sup>34</sup>

I will now present the key steps of Badiou's provisional axiomatization of Althusser's theory in 'The (Re)commencement of Dialectical Materialism' and show that, while this opens the door to a mathematization of dialectical materialism, this also makes two significant modifications to Althusser's theory: the role of contradiction is excluded and anti-empiricism becomes non-empiricism (pure formalism).

Badiou begins by stating that to model structural causality formally requires a fresh presentation of the fundamental concepts of Althusser's theory:

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<sup>32</sup> Althusser, Louis, 'Lenin before Hegel', in *Lenin and Philosophy*, trans. by Ben Brewster (London: Verso, 1971), p. 117.

<sup>33</sup> Badiou, 'Mark and Lack', pp. 174, 166.

<sup>34</sup> *Ibid.*, p. 167.

This organisation begins by providing itself with some primitive words, that is to say, *undefined* notions that will be transformed into concepts by their ‘axiomatic’ linkage into the system. (RDM 153)

Like Spinoza’s famous geometrical method, this approach asserts a statement as the point of departure for a deductive system. Badiou’s careful choice is Althusser’s hypothesis of practice from ‘On the Materialist Dialectic’:

By *practice* in general I shall mean any process of *transformation* of a determinate given raw material into a determinate *product*, a transformation effected by a determinate human labour, using determinate means (of ‘production’). In any practice thus conceived, the *determinant* moment (or element) is neither the raw material nor the product, but the practice in the narrow sense: the moment of the *labour of transformation* itself, which sets to work, in a specific structure, men, means and a technical method of utilising the means.<sup>35</sup>

In Althusser’s text this is one of two hypotheses (the other is the concept of theory) that serve as points of departure for renewing the validity of the Leninist slogan ‘Without revolutionary theory, no revolutionary practice’.<sup>36</sup> Interestingly, Althusser’s hypothesis of practice is one of his more Hegelian statements because it posits ‘the moment of the *labour of transformation*’ as the essence of practices. Prioritising such a simple notion of labour deletes an important difference between Marx and Hegel.<sup>37</sup>

Seemingly unaware that this beginning might be more Hegelian than Marxian, Badiou prioritises ‘practice in the narrow sense’, making it the first mechanism of the logical process of structural causality, a mechanism that produces a combinatory from three ‘primitive’ elements: ‘(1) the labour force, (2) the means of labour, (3) the forms of application of force to means.’ (RDM 153)

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<sup>35</sup> Althusser, *For Marx*, pp. 166–7.

<sup>36</sup> *Ibid.*, p. 166.

<sup>37</sup> For Marx labour has a ‘twofold character’: ‘concrete useful labour’ and ‘labour itself represented in value’, cf. Marx, Karl, *Capital: A Critique of Political Economy*, trans. by Ben Fowkes, vol 1 (London: Penguin, 1990), p. 137. This is important because, consistent with Marx’s mode of theoretical presentation in *Capital*, this inner ‘twofold character’ develops into an external ‘contradictory movement’; specifically, in *Capital* between ‘material wealth’ and ‘the magnitude of its value’. Furthermore, Marx’s conception of labour has this ‘twofold character’ because it is a subcategory of the most basic form: the commodity—which means that in a systematic theoretical presentation labour cannot serve as the starting point for conceptualization. Marx’s methodological anti-naturalism takes neither substance nor human nature (labour) as the point of departure, instead he departs from the commodity form because it is what he considers the basic synthetic category of capitalist social formation.

The product—‘the first set [*ensemble*]’—is ‘the *list of practices*’ whose ‘invariant segment’ contains economic practice, ideological practice, political practice, theoretical practice. (RDM 153, trans. modified)

The second step in Badiou’s axiomatization of structural causality is the formation of a whole by articulating the ‘instances’ of the list of practices. Badiou defined its mechanism as ‘a practice *such as* it is articulated onto all the others’ (RDM 154)—what recalling Malebranche’s occasionalism, I will call the mechanism of *instantiation*. For Malebranche, a subset of all the possible essences are instantiated at any given moment due to the selection of God’s will.<sup>38</sup> In this sense, Malebranche thinks essences exist ‘in’ God, that is, in the intelligible world of his infinite intellect. Badiou’s presentation has a list of practices for what Malebranche’s theory of instantiation calls essences, and instantiated subsets are distinct mappings of one practice onto all the others. However, the decisive function of instantiation—the activity of the Subject (God’s will)—is not defined.

Finally, in the third step: ‘What remains to be *developed* is its knowledge [*connaissance*].’ (RDM 155) Here Badiou invokes Althusser’s thesis that ‘*the complex whole has the unity of a structure articulated in dominance*’.<sup>39</sup> The dominant instance is the one ‘whose concept is required to think the actual *efficacy* of the others. Or to be more exact, the instance *on the basis of which*, for a given “stasis” of a social totality, we can rationally traverse the complete system of instances in the actual order of their degrees of efficacy.’ (RDM 155) For Badiou the sequence or ‘trajectory’ prescribed by this function determines knowledge of a conjuncture:

Let us agree to call conjuncture the system of instances such as it is thinkable according to the trajectory prescribed by the mobile hierarchy of efficacies. The conjuncture is first of all the determination of the *dominant* instance, whose mapping fixes the *point of departure* of the rational hierarchy of the whole. (RDM 155)

Badiou formalizes determination of the whole with three consecutive mechanisms. Each is a variant of the abstract logical form  $f(x)$ , which Badiou uses to formalize transformation. The mechanisms are hierarchically organised such that the output of the first provides input for the second, and the output of the second provides input for the third. I will briefly summarize these three mechanisms to show how this axiomatic linkage is sketched out in abstract terms, bearing in mind that Badiou warns

<sup>38</sup> Pyle, Andrew, *Malebranche* (London: Routledge, 2006), p.55.

<sup>39</sup> Althusser, *For Marx*, p. 202.



that ‘this construction is incomplete and obscure.’ (RDM 166) After this we will be in a good position to assess the limitations of this approach.

The first defines possible practices:<sup>40</sup>

$$p : f(m)$$

This mechanism is composed of variables which should be understood as follows:  $p$  designates ‘practice’,  $f$  ‘labour force’,  $m$  ‘means of labour’. This mechanism prescribes the general form of *practice* as the application of  $f$  onto  $m$ , in other words, the transformation of means by force. The total list of possible practices is defined by the bounds of the variables  $f$  and  $m$ , and are collected into a set  $F$ , whose elements are the practices  $\{p, p_1, p_2, p_3 \dots\}$ .

The second determines a set of practices over  $F$ :

$$P : det(H)$$

$H$  is a subset of  $F$ ,  $det$  is the ‘determinant practice’,  $P$  the set of ‘instances’. One of the elements in  $H$  is selected to be the determinant practice and marked  $det$ .  $P$  is determined by the bi-univocal application of  $det$  to all the elements of  $H$  (including itself). The bi-univocal application of  $det$  onto  $H$  establishes a complete one-to-one correspondence of elements from  $H$  to  $P$ , and can be articulated from  $P$  to  $H$  according to the inverse function  $det^{-1}$ . Determination has a double function: it also selects one of the other elements in  $H$  as the ‘dominant instance’ and names it  $dom$  in  $P$ . For example: if  $H$  is  $\{p, p_1, p_2, p_3\}$ , the element  $p$  is  $det$  and selects  $p_1$  to be  $dom$ , then  $P$  is the following set of determined instances of  $H$ :  $\{det(det), det(dom), det(p_2), det(p_3)\}$ .

The third maps the displacement of dominance:

$$dom_n = dom(dom_{n-1})$$

The first instance of domination,  $dom_1$ , is the determined one,  $det(dom)$ . Once determined, this element has the power to order all the elements of  $H$  recursively,

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<sup>40</sup> Badiou’s axiomatization (RDM 164–66) begins with a ‘[s]et  $F$  of functions, or practices’  $\{f, f', \dots\}$ . Although this is necessary to present the process as purely mathematical from the beginning it is not compatible with Badiou’s use of Althusser’s hypothesis of practice as the point of departure. This is because this hypothesis requires the qualitative distinction of force and means of labour—if force and means of labour belong to the general set of functions  $\{f, f', \dots\}$  then it would be possible for the mechanism of *practice* to apply a labour force to a different labour force, or a means of labour to a different means of labour; rather than only applying a labour force to a means of labour. I have therefore not followed Badiou’s symbolisation here, instead I have used letters which index Althusser’s hypothesis of practice and Badiou’s axioms of instance and conjuncture more obviously. From Badiou’s symbolisation I have preserved  $det$ ,  $dom$ , and  $H$ , the latter symbolising what Badiou calls the ‘historically representable’ subset of the set of practices.

starting with itself,  $dom(dom_1)$ , which is then indexed as the second instance of domination,  $dom_2$ . The third instance of domination results from the application of the  $dom$  function to the second instance of domination,  $dom(dom_2)$ , and so on.

The problem is that Badiou's mechanization of the process of structural transformation does not preserve the revolutionary dimension to Althusser's theory. This is because Badiou presents determination as the double articulation of a bi-univocal function and this does not permit the determination of contradictory instances.

In 'On the Materialist Dialectic' Althusser recycles the mechanism of transformation from his compelling interpretation of the Russian revolution in 'Contradiction and Overdetermination'. Althusser outlines the structural conditions for revolution in terms of the relative autonomy of superstructural contradictions. The relevant passage in the earlier version of this theory is this:

Of course, the basic contradiction dominating the period (when the revolution is 'the task of the day') is active in all these 'contradictions' and even in their 'fusion'. But, strictly speaking, it cannot be claimed that these contradictions and their fusion are merely the *pure phenomena* of the general contradiction. The 'circumstances' and 'currents' which achieve it are more than its phenomena pure and simple. They derive from the relations of production, which are, of course, one of the *terms* of the contradiction, but at the same time its *conditions of existence*; from the superstructures, instances which derive from it, but have their own consistency and effectivity<sup>41</sup>

The importance of contradiction to revolution is stated in the final sentence: the revolutionary situation *derives* from 'the relations of production' *and* the superstructures, which have 'their own consistency and effectivity'. Since Althusser's analysis is based on a linguistic model, contradiction is here equivalent to the affirmation that both a statement and its negation are derived. However, this is precisely what formal logic proscribes. As Badiou argues in 'Mark and Lack', apart from true and false statements, the only other possibility in formal logic is that a statement is *irrefutable*—'neither it nor its negation is derivable'.<sup>42</sup> In Badiou's axiomatization of the conjuncture in 'The (Re)commencement of Dialectical Materialism', the same principle applies: although it is possible for any practice to be the determinant instance,

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<sup>41</sup> Althusser, *For Marx*, p. 100.

<sup>42</sup> Badiou, 'Mark and Lack', p. 163.

it is not possible for a determined instance to have a consistency and effectivity other than that of its place in the system outlined above.

This is because Badiou's axiomatization presumes that all conjunctures are derivations of a general logic. This means that any change of conjuncture is merely another variant of the same system. Technically, such transformation is made possible by the operation of the inverse function of determination, which sends the system to the level of possible practices. At this level, a different permutation can be constructed, presumably by the arbitrary selection of another practice as determinant, although this is one of the points Badiou leaves underdeveloped. More importantly, this logic is unable to account for the '*accumulation and exacerbation of historical contradictions*' that leads to the formation of what Althusser called an 'exceptional situation' in which superstructural contradictions are determined by, yet simultaneously irreducible to, 'the permutations of the principal role between the economy, politics, theory etc.'<sup>43</sup>

There is a crucial difference then, between the regulated type of transformation in Badiou's 'The (Re)commencement of Dialectical Materialism', and the contingent type in Althusser's 'Contradiction and Overdetermination'. For Badiou, transformation is internal to the general logic of conjuncture formation. It requires a reversal of the determination function, effectively returning it to zero so that a new type can be posited. However, in Althusser's analysis of the 'gigantic contradiction' in Russia in 1917, power changed hands because the contradiction between the dominant ideology and the masses intensified such that decisive and organized revolutionary action could seize control of the state. This hinges on the subjective unity of masses under an alternative ideology, and this fusion of objectively determined elements into an alternative political unity is precisely what is excluded from Badiou's pure mechanization of transformation. The key passage in Althusser's text is the following:

This exceptional situation was 'insoluble' (for the ruling classes) and Lenin was correct to see in it the *objective conditions* of a Russian revolution, and to forge its *subjective conditions*, the means of a decisive assault on this weak link in the imperialist chain, in a Communist Party that was a chain without weak links.<sup>44</sup>

Of course, the belief that the Communist Party 'was a chain without weak links' provides an illusory unity, however, this is necessary to transform objective revolutionary conditions into subjective revolutionary conditions. The consequence of

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<sup>43</sup> Althusser, *For Marx*, p. 97, 213.

<sup>44</sup> *Ibid.*, pp 97–98.

removing contradiction from this theory is that the displacement process cannot itself produce the conditions for a decisive transformation of the conjuncture. In Badiou's axiomatization, this is because the displacement of determined instances by domination is nothing more than an effect of the determinant function pure and simple; the possibility of transformation is prescribed by the general logic, specifically, that the determination function is bi-univocal and therefore the determined whole can unravel from any point. This is a departure from Althusser's adherence to the principle of determination in the last instance by the economy since any practice can be determinant, and therefore it is theoretically possible for political (or artistic) practices to determine economic ones in Badiou's general logic. By the same token, every determination includes the structural possibility of disintegration. That a complete undoing of the effects of a given mode of determination is necessary for a new type to be posited is also a departure from Althusser's conceptualization of structural transformation. In my view, Althusser's version of structural transformation is more practical than Badiou's axiomatization for the simple reason that its possibility does not depend on the prior collapse of the existing order. Ultimately, this is merely a formal solution to a concrete problem. As Marx put it, 'in reality processes do not take place in their pure form.'<sup>45</sup>

In the remainder of this section I will show that Badiou's axiomatization implies a different investment in the agency of the unconscious to Althusser and Lacan.

Although he reverses the order of 'condensation' and 'displacement' in the primary process of Freud's theory of dream formation, Althusser uses it in 'Contradiction and Overdetermination' to understand the Russian revolution as caused by the imperial system's 'displacement' of subordinate forces, which ultimately leads to the 'condensation' of a new power capable of defeating the imperialist forces. This involves two modifications to Freud's theory that deserve our attention because they help us clarify the relation of Badiou's axiomatization to Freud's theory of dream-work. Firstly, while Freud set out 'to complete a dream-analysis by a dream-synthesis',<sup>46</sup> Althusser's application of Freud's theory is limited to analysis. By contrast, Badiou's axiomatization prioritizes what Freud called 'a complete synthesis' that is universally intelligible.<sup>47</sup> Secondly, while for Freud it is 'the censor' of secondary process which

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<sup>45</sup> Marx, *Capital*, vol 1, p. 262.

<sup>46</sup> Freud, Sigmund, *The Interpretation of Dreams* [1900], in *The Standard Edition of the Complete Psychological Works*, trans. and ed. by James Strachey, 24 vols (London: Vintage, 2001), IV, p. 310.

<sup>47</sup> *Ibid.*, p. 420.

‘criticizes’ the condensation of dreams that contradict the reality principle,<sup>48</sup> in Althusser’s version ‘the critical point’ is when subordinate forces ‘condense’ and “‘fuse” into a *ruptural* unity’.<sup>49</sup> In Badiou’s account ‘condensation’ is indistinguishable from derivation. At the level of determination, instances are derived without the repressive intervention of a censor, and at the level of instances of dominance, there can be no ‘fusion’ of subordinate practices into a critical mass which contradicts the dominant practice.

Althusser’s peculiar use of Freud’s notions of ‘condensation’ and ‘displacement’ is indebted to Lacan, who interprets ‘condensation’ and ‘displacement’ linguistically as ‘metaphor’ and ‘metonymy’—the critical point being the discursive shift from metonymic substitutions to metaphorical reformulation: when language denotes a different object. This crucial part of Althusser’s early theory is entirely overlooked in ‘The (Re)commencement of Dialectical Materialism’. Remarkably, Badiou does not address the following passage, which Althusser published in ‘Freud and Lacan’ in December 1964:

Lacan specifies, ‘The discourse of the unconscious is structured like a language.’ In his great first work, *The Interpretation of Dreams*, which is not anecdotal or superficial, as is often believed but fundamental, Freud studied dreams’ ‘mechanisms’ or ‘laws’, reducing their variants to two: *displacement* and *condensation*. Lacan recognised in these variants two essential figures designated by linguistics: metonymy and metaphor. Hence slips of the tongue, botched gestures, jokes, and symptoms became like the elements of the dream itself: *signifiers* inscribed in the chain of verbal discourse. Thus were we introduced to the paradox, formally familiar to linguistics, of a discourse both double and unitary, unconscious and verbal, having as its double field of deployment but a single field, with no beyond other than in itself: the field of the ‘signifying chain.’<sup>50</sup>

Like Lacan, Althusser wagers that the unconscious can be interpreted linguistically, and taking ‘condensation’ as the ‘critical’ point he opposes the immanent real of the unconscious to the normalising censorship of the reality principle. This follows Lacan’s directive ‘that reality isn’t just there so that we bump our heads up against the false paths along which the functioning of the pleasure principle leads us. In truth, we make

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<sup>48</sup> Ibid., p. 648.

<sup>49</sup> Althusser, *For Marx*, pp. 212, 99.

<sup>50</sup> Althusser ‘Freud and Lacan’, in *Writings on Psychoanalysis* trans. by Jeffrey Mehlman and ed. by Oliver Corpet and François Matheron (New York: Columbia University Press, 1996) [December 1964], p. 24.

reality out of pleasure.’<sup>51</sup> Lacan’s hypothesis that ‘The discourse of the unconscious is structured like a language’ is fundamental to Althusser’s theory of revolution, because it is only if the critical function of negation is immanent to the linguistically structured whole that conjunctures can be treated as paradoxical or contradictory wholes.

While Lacan did what Freud hesitated to do in the *Interpretation of Dreams*—free the unconscious from the normalising censorship of the reality principle—it was at a price: the arguably more radical possibility that the unconscious might not be structured like a language is closed. Although, in *The Interpretation of Dreams*, Freud presents the contradictory trains of unconscious thoughts as structured by the familiar ‘logical connections’ of language (e.g. ‘if’, ‘because’, ‘just as’, ‘although’, ‘either/or’);<sup>52</sup> what is more important is his assertion that ‘dreams have no means at their disposal for representing these logical relations between dream-thoughts.’ Therefore, for Freud: ‘The restoration of the connections which the dream-work has destroyed is a task which has to be performed by the interpretative process.’<sup>53</sup> However, the question remains: what structure does interpretation presume the unconscious to have? Following Lacan, Althusser makes a double presumption: that the unconscious is a discourse and that this discourse is structured like a language. This effectively imposes a grid of intelligibility in which the effects of the unconscious can appear, a grid with two axes of articulation: metonymy and metaphor.

To conclude this section, Badiou’s rejection of contradiction is not only a departure from Althusser but also from Marx. In terms of articulation, Badiou preserves little from Marx, and prioritizes Althusser’s non-Marxian hypothesis of practice and a set of terms from Althusser’s theory and Marxist doctrine (dialectical materialism, practice, instance, conjuncture, dominant, determinant). Badiou’s articulation cannot think revolution as the result of overdetermination because his mode of articulation has a single active principle: the ‘bi-univocal’ function  $f(x)$ . Also, as an articulation of the unconscious logic of Marxist theory Badiou’s preservation of classical logical relapses further than any of Freud’s normalising revisions: Badiou asserts that ‘there exists no other resource, at least if one wants to be able to *speak* about that of which the silent reality (silent *in theory*) interpellates us and makes us into the “bearers” of determinate

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<sup>51</sup> Lacan, Jacques, *The Ethics of Psychoanalysis*, trans. by Dennis Porter and ed. by Jacques-Alain Miller, *The Seminar of Jacques Lacan: Book VII, 1959–1960* (New York: Norton, 1997) [1986], p. 225.

<sup>52</sup> Freud, *The Interpretation of Dreams*, p. 312.

<sup>53</sup> *Ibid.*, p. 312.

historical functions.’ (RDM 167) Freud did not budge on this point: ‘The logical laws of thought do not apply in the id, and this is true above all of the law of contradiction.’<sup>54</sup> The distinctive feature of Badiou’s early theory is the presumption that these laws operate perfectly in the mathematical unconscious, which, moreover, is even further removed from consciousness and humanism than the unconscious in Freud or Lacan. In my view, this couples progressive and regressive aspects: the determination to think the unconscious not structured like a language is to be applauded, while the neoclassical renewal of the principle of non-contradiction is regrettable. Although Badiou does not discuss Freud, his reading of Althusser preserves the intuition that the unconscious constitutes itself in the process of repetition (RDM 147). Published only a few months later in 1967, *Portulans* provides an alternative articulation of the constitution of the unconscious through repetition. In both texts the representatives (‘characters’ in *Portulans* and ‘instances’ in ‘The (Re)commencement of Dialectical Materialism’) belong to a game of inscription in which permutations play out. The obvious difference is that, while in *Portulans* the structure of the group of permutations is a figurative maritime map, in ‘The (Re)commencement of Dialectical Materialism’ the idea that the structure of the group is mathematical is explicit. This shift is important because it rejects the notion that structure is linguistic. Badiou developed this idea quickly in 1967 and 1968. In ‘The (Re)commencement of Dialectical Materialism’ he supposed that the unconscious is structured like a mathematical group. In *Concept of Model* he went further, supposing that the unconscious is structured like the universe of sets.

SET = SOCIAL STRUCTURE?

In this section, I will explain why Badiou’s early turn to set-theoretical structure is an alternative to the notion of social structure in Lévi-Strauss.

In ‘The (Re)commencement of Dialectic Materialism’ Badiou takes Althusser’s appropriation of linguistics as a point of departure for his discussion of structural causality: ‘The linguistic analogy would have us say that *the process of the exposition* in which the object of science apodictically manifests itself is the syntagm of a *theoretical paradigm*.’ (RDM 151) Later, when closing this discussion, he claims that it is possible to break with such linguistic interpellation, rejecting ‘the old ideology of mathematics

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<sup>54</sup> Freud, Sigmund, ‘The Dissection of the Psychical Personality’ [1932], in *The Standard Edition of the Complete Psychological Works*, trans. and ed. by James Strachey, 24 vols (London: Vintage, 2001), XXII, 106.

as language’, and asserting ‘that mathematics is not, in physics, in fundamental biology, etc., subordinate and expressive, but primary and productive.’ (RDM 167, n. 62)

Let’s initially establish that in his early reception of Lévi-Strauss, Badiou’s credits him with clarifying the problematic of structuralism but chooses to tackle it from a different angle. Not for the first time in ‘The (Re)commencement of Dialectic Materialism’, Badiou makes an important point in a footnote:

The fundamental problem of *all* structuralism is that of the term with the double function, inasmuch as it determines the belonging of all the other terms to the structure, while itself being excluded from it by the specific operation through which it figures in the structure only in the guise of its *representative* (its *lieu-tenant*, or place-holder, to use a concept from Lacan). It is the immense merit of Lévi-Strauss, in the still mixed form of the zero-signifier, to have recognised the true importance of this question. See Claude Lévi-Strauss, *Introduction à l’œuvre de Mauss*, [...] Pinpoint the place occupied by the term indicating the specific exclusion, the pertinent lack—that is to say, the *determination* or ‘structurality’ of the structure. Jacques-Alain Miller has given an exposé of this problem to which we must refer. See ‘La Suture’ (RDM 157, n. 45)

For Badiou, this is a classical problematic since ‘the Cartesian/Spinozan relation between God and the adequate idea of God’ is its first ‘model’ (RDM 163). Its root is the Spinozist problem of ‘the deduction of the modes—the determination of “that which” is structured by the structure, from that *on the basis of which* the structure is defined.’ In his axiomatization of Althusser’s theory, Badiou asserts that ‘the system of instances’ cannot be conceptualised without articulating the way in which determination (‘which manifests itself *within* the linked multiplicity of instances by the effects of displacement’) and domination (‘from which we can only think the conjuncture, or the *existing* type of unity of the instances’) belong to a general theory that ‘allow[s] us to produce the *collectivizing* concept of the instances.’ Badiou’s specification that structure is set-theoretical defines his approach to this.

I will now consider Badiou’s criticism of Lévi-Strauss’s treatment of this problem in the first volume of *Structural Anthropology* (1958),<sup>55</sup> and then I will discuss his criticism of Miller’s alternative. In *Concept of Model* Badiou reproaches Lévi-Strauss for preserving 18th century philosophy of representation in which ‘science is not a process of practical transformation of the real, but the fabrication of a plausible

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<sup>55</sup> Lévi-Strauss, Claude, *Structural Anthropology*, vol 1, trans. by Claire Jacobson and Brooke Grundfest Schoepf (New York: Basic Books, 1963) [1958].



image.’ (CM 16) Badiou contends that any attempt to correlate ‘the neutral observation of facts and the active production of a model’ (CM 10) suppresses real formal autonomy. This view is based on a distinction that persists in Badiou’s thought: the formal is the ‘controllable’ realm of ‘theoretical *transparency*’ and is absolutely distinct from ‘the characteristic opacity’ of the empirical (CM 10). Badiou derides any attempt to bridge this epistemological divide suggesting that it is at best academic accounting and at worst a means for controlling and exploiting people. About ‘a well-known methodological text by Lévi-Strauss’, Badiou says this:

Lévi-Strauss, in sum, transfers, to epistemological discourse, the institutional opposition of the ethnographer in the field, the attentive collector of customs, and the ethnologist in the town, the armed commander of his archived people—or even the speculative opposition between Nature (the continuous opacity of what occurs) and Culture (the bricolage of denumerable differences). Lévi-Strauss thus opposes, in the positivist tradition, passive information to an activity whose meaning is to reproduce the order in which the information assembles itself. (CM 14–15, trans. modified)

The text in question is ‘Social Structure’, a paper Lévi-Strauss delivered in 1952 and published in the first volume of *Structural Anthropology*. Badiou doesn’t mention that the notion of ‘social structure’ is key to this distinction of culture and nature. Lévi-Strauss: ‘The term “social structure” has nothing to do with empirical reality but with models which are built up after it.’<sup>56</sup> He adds ‘social relations consist of the raw materials out of which the models making up the social structure are built, while social structure can, by no means, be reduced ‘to the ensemble of the social relations to be described in a given society.’ It is doubtful that this problem can be easily separated from the problem of the zero signifier that Badiou applauded. The ‘pertinent lack’ (to borrow Badiou’s phrase) here is between social structure and social relations. Badiou’s reproach is instead directed at the opposition of nature and culture; and as anyone familiar with *The Elementary Structures of Kinship* will know, Lévi-Strauss’ account of the determination of a social whole is based on a distinctive reformulation of this old ‘contradiction’, which Jameson correctly points out ‘ought more properly to be termed an *antinomy*’.<sup>57</sup> Lévi-Strauss’ treats the opposition between nature and ‘its theoretical contradiction, culture’ as a dilemma of the mind; as what Kant famously called a

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<sup>56</sup> Ibid., p. 279.

<sup>57</sup> Jameson, *The Prison House of Language*, p. 213.

‘contradiction in the laws (antinomy) of pure reason’.<sup>58</sup> Following the precedent set by Kant, Lévi-Strauss’ ‘solution’ to this antinomy was practical. More precisely, it is solved by the emergence of human practice in general, that the emergence of language as structuring activity, a sudden change that made it possible for cultural norms to have a rationality independent from natural laws. Lévi-Strauss contended that this was posited by a ‘radical change’ in the natural passage of time, the ‘moment when the entire universe all at once became *significant*’.<sup>59</sup> In other words, when a part of nature began to speak about itself and nature as a whole. Christopher Johnson has persuasively argued that, although in the 1950s Lévi-Strauss drew upon mathematical models of information theory and cybernetics for thinking mechanisms of communication, he prioritised linguistics when it came to the question of the scientificity of anthropology to the extent that the informational paradigm ‘is in fact mediated through linguistics.’<sup>60</sup>

Above all, what Badiou objects to is Lévi-Strauss’s attempt to *reduce* phenomena to elementary forms. Abstraction from phenomena, Badiou contends, is an obstacle to genuine political theory. The first claim, in the passage quoted above, is that formal reduction is irredeemably tangled up with exploitation and abuse of power. The ethnologist’s reductive devices impose his account onto a situation. The second claim is that if the meaning of formal constructions is limited to their use as statements about the world, the real productive potential of formalism is curbed. The potential for genuine political thought, Badiou has submitted ever since, stems from the autonomy of purely formal thinking. This controversy has sustained Anglophone interest in Badiou’s theory for over a decade. Recently, Bosteels has tried to move on from this by attributing a ‘modest role’ to mathematics in his ‘reading of Badiou and politics.’<sup>61</sup> However, the reading produced by this approach not only obscures the root of the problem, it underestimates the importance of mathematics in Badiou’s recasting of Maoism from 1980s onwards. By contrast, Hallward appreciates the centrality of mathematical formalism to Badiou’s thought and concludes that therefore it ‘will always remain unduly abstract.’<sup>62</sup> This problem should be treated at its root: Badiou’s confidence in

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<sup>58</sup> Kant, Immanuel, *Critique of Pure Reason*, trans. and ed. by Paul Guyer and Allen W. Wood (Cambridge: Cambridge University Press, 2005), p. 460.

<sup>59</sup> Lévi-Strauss, Claude, *Introduction to the Work of Marcel Mauss*, trans. by Felicity Baker (London: Routledge, 1987) [1950], p. 62.

<sup>60</sup> Johnson, Christopher, *Claude Lévi-Strauss: The Formative Years* (Cambridge: Cambridge University Press, 2003), p. 98.

<sup>61</sup> Bosteels, *Badiou and Politics*, p. xviii.

<sup>62</sup> Hallward, *Badiou: A Subject to Truth*, p. 322.

mathematics for thinking universality, what he later defines as his Platonism. I will return to these points in chapters 3 and 4.

Taken together, Badiou's citations of Lévi-Strauss in the late 1960s are evidence that, although he was interested in addressing the problem of structuralism, he believed that the answer needed to prioritise and clarify the alternative possibility in Lévi-Strauss' work in the 1950s: that the determination of structure is fundamentally mathematical in nature. It should be no surprise that Badiou originally framed this in terms of how nature articulates itself rather than the positivist concern with the way in which people use logic, totems and myth to order and make sense of nature.

I will now turn to Badiou's criticism of Miller's logic of the Signifier in 'Suture (Elements of the Logic of the Signifier)'.<sup>63</sup>

Badiou's mathematical treatment of the problem of structuralism affirms that it is possible to think totalization as axiomatic infinitization. We recall that immanent subversion was his method of aesthetic transformative totalisation in *Almagestes* and *Portulans*, and his defence of a post-Cantorian conception of infinity in 'Subversion Infinitesimal' outlines the pure science of immanent subversion. Cantor discovered that an infinity is a number whose cardinality (size) exceeds that of an existing finite realm. What pre-Cantorian failed to recognize was that iterative counting presupposes an empty space since the sequence must be inscribed somewhere, and that this 'support', which is always ahead of the count, is the infinity of that sequence. With every new instance of a successor function (e.g.  $n+1$ ), what Badiou calls 'the "potential" infinite' (i.e. the approximation of infinity by endless counting) 'testifies retroactively to the "actual" infinity of its *support*'.<sup>64</sup> Furthermore, an infinite number subverts a finite realm because it is a term with a double function: on the one hand, it marks within a domain 'that which is averred in it only as void', which effectively 'closes off' that domain 'by occluding the voids determined within it'; and on the other hand, 'it opens up a higher domain as the first point of a second space in which the initial procedures can be exercised. This pulsation of closure and opening defines the infinity-point: it is the zero of a higher stratum.'<sup>65</sup>

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<sup>63</sup> Miller, Jacques-Alain, 'Suture (Elements of the Logic of the Signifier)', trans. by Jacqueline Rose, in *Concept and Form*, ed. by Peter Hallward and Knox Peden, I, 69–83.

<sup>64</sup> Badiou, 'Infinitesimal Subversion', p. 187.

<sup>65</sup> *Ibid.*, p. 188.

In 'Suture', Miller claims that the elementary form of the logic of the signifier is the successor function  $n+1$ . According to him, this basic form of counting is 'the function of the subject' because it produces the positive natural number sequence as the 'evocation' of the fundamentally uncountable nature of the subject, its contradictory 'support'.<sup>66</sup> Miller's argument is premised on the assumption that zero is a thing without identity, and drawing on Frege's *The Foundations of Arithmetic*,<sup>67</sup> he argues that 'the counting of 0 as 1' engenders the 'autonomous construction of the logical through itself'; that effectively, 'the non-conceptualizable is conceptualized'.<sup>68</sup> Furthermore, the subject is 'subsequently rejected from the dimension of truth' because it operates without external reference.<sup>69</sup>

However, the flaw in Miller's argument, as Badiou showed 'Mark and Lack', is that, as a mark of non-identity in a strictly mathematical sense, zero is neither contradictory nor a subject; it is a self-identical *predicate*. This technical point boils down to the following: although the first-order calculus of identity will reject self-identical marks, it is possible to extend the set of derived identities by indexing a non-identity with new self-identical marks, and this 'representative' of identity will be duly derived by the calculus. In the first-order calculus of identity, the form of non-self-identity is  $\sim I(x,x)$ , and this can be 'abstracted' as the mark 0 (in the mathematical sense of substituting a one-place predicate for a two-place predicate). The power of abstraction enables the standard space of the calculus to be extended without contradiction. Since zero is added to the system as an extra mark that stands for something within the system, zero is a meta-discursive element (it enables us to say more about the system by adding an element not initially included in its alphabet), and is therefore technically a predicate variable. As Badiou puts it, Miller's argument is refuted because zero is constructed 'not as a term but as a *predicate*'.<sup>70</sup>

In his recent 'Acting out the Structure', Patrice Maniglier drew on Badiou's criticism of Miller to reject the mathematical aspect of 'Suture' whilst attempting to show that the Lacanian subject is essentially Lévi-Straussian: 'The truth about the subject can only be expressed through tropes. The Lacanian subject is essentially

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<sup>66</sup> Miller, 'Suture', p. 94, 97.

<sup>67</sup> Frege, Gottlob, *The Foundations of Arithmetic*, trans. by J.L. Austin (Oxford: Blackwell, 1978).

<sup>68</sup> Miller, 'Suture', p. 97.

<sup>69</sup> *Ibid.*, p. 97.

<sup>70</sup> Badiou, 'Mark and Lack', p. 170, n. 20.

tropical.<sup>71</sup> Maniglier's prioritization of figurative over mathematical form is illustrated in the following remark about a key passage from Lévi-Strauss' *The Naked Man*: 'It is quite striking that the modest bicycle mechanism appears to be a more accurate model of structure than algebra.'<sup>72</sup> In his criticism of Lévi-Strauss' use of group theory in *The Elementary Structures of Kinship*, Maniglier makes a similar point to Robert Gandy, who, in "'Structure" in Mathematics', pointed out that the calculation of permutations of a mathematical group takes place on the basis of its prescribed closure, and therefore: 'The resulting action must again be a member of the group'.<sup>73</sup> Maniglier puts this concisely: 'you cannot get out of a group by using only operations internal to the group.'<sup>74</sup> Clearly then, the concept of group does not account for 'tropical' subjectivity, which is essentially a socializing function that borrows elements from different symbolic structures to produce a sense of totality in another. In my view, however, little is retained in this from the Lacanian problematic of the subject of science. Although this effectively explains how totality is permanently displaced in an imbrication of symbolic structures, and can therefore explain how a network of structures 'points at something that cannot be designated as such',<sup>75</sup> the price (which Maniglier willingly pays) is that the logic of the signifier is only intelligible 'as the *image* of a concept'.<sup>76</sup>

We are now able to specify Badiou's alternative to Lévi-Strauss' concept of social structure in terms of his recasting of the zero signifier. In the programmatic structuralist text that Badiou cited in 'The (Re)commencement of Dialectic Materialism' Lévi-Strauss defended the fundamental role of mythical totalisation in social practice: 'a fundamental situation perseveres which arises out of the human condition: namely, that man has from the start had at his disposition a signifier-totality which he is at a loss to know how to allocate to a signified, given as such, but no less unknown for being given. There is always a non-equivalence or "inadequation" between the two, a non-fit and overspill which divine understanding alone can soak up'.<sup>77</sup> The concept of *mana* in Mauss and Durkheim's work, Lévi-Strauss argued, is a typical

<sup>71</sup> Maniglier, Patrice, 'Acting out the Structure', in *Concept and Form*, ed. by Peter Hallward and Knox Peden, II, 25–46.

<sup>72</sup> Ibid., p. 36.

<sup>73</sup> Gandy, Robin, "'Structure" in Mathematics', in *Structuralism*, ed. by David Robey (Oxford: Clarendon, 1973), p. 144.

<sup>74</sup> Maniglier, 'Acting out the Structure', p. 36.

<sup>75</sup> Ibid., p. 28.

<sup>76</sup> Ibid., p. 39.

<sup>77</sup> Lévi-Strauss, *Introduction to the Work of Marcel Mauss*, p. 62.

example of the ‘signifier-surfeit’ which occurs ‘to represent an indeterminate value of signification, in itself devoid of meaning and thus susceptible of receiving any meaning at all’.<sup>78</sup> Lévi-Strauss called it ‘that *floating signifier* which is the disability of all finite thought’ whose ‘*zero symbolic value* [...] can be any value at all, provided it is still part of the available reserve, and is not already, as the phonologists say, a term in a set.’<sup>79</sup> In Badiou’s alternative, the zero signifier does not represent excess on the side of the signified, instead it prescribes infinitization as the signifier’s inner necessity: ‘The marking of an infinity point is an operation of the *signifier* as such.’<sup>80</sup> (CF1 203) For Badiou, axiomatic protocols are the ability of infinite thought; they are the means by which purely formal thinking can satisfy its inner necessity: the marking of an infinity point ‘is the zero of a higher stratum.’<sup>81</sup> This changes the orientation of structuralist thinking. The whole point of Lévi-Strauss’ zero signifier is that it enables empirical socialising activity via the interaction of symbolic structures. The point of Badiou’s ‘zero signifier’ is to make pure mathematical idealities accessible. Therefore, the concept that Badiou gifts Althusser’s theory for conceptualising the ‘*society effect*’ (RDM 151) limits it to a purely formal intelligibility. The persistence of the imaginary in this retreat—from which Badiou’s formalist politics springs—will be addressed in the next section.

Badiou’s distance from Sartre at this juncture is important. As Stathis Kouvélakis and Nina Power<sup>82</sup> have pointed out, Badiou’s unique position in French philosophy is ‘between Sartre and Althusser’.<sup>83</sup> However, in the late 1960s, his affirmation of mathematical structure without a subject arguably placed him further from Sartre than at any other point in the development of his thought.

This is clear in Badiou’s rejection of Sartrean totalisation in ‘The (Re)commencement of Dialectical Materialism’: ‘Sartre’s totalisation is the fantasmatic critique of fantasy: an intra-ideological displacement progress’ (RDM 149, n. 27). In *Critique of Dialectical Reason* Sartre wrote that ‘Lévi-Strauss’ work makes an

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<sup>78</sup> Ibid., p. 55.

<sup>79</sup> Ibid., pp. 63, 64.

<sup>80</sup> Badiou, ‘Infinitesimal Subversion’, p. 203.

<sup>81</sup> Ibid., p. 188.

<sup>82</sup> Power, Nina, ‘From Theoretical Antihumanism to Practical Humanism: The Political Subject in Sartre, Althusser and Badiou’ (unpublished doctoral thesis, Middlesex University, 2006).

<sup>83</sup> Kouvélakis, Stathis, ‘La politique dans ses limites ou les paradoxes d’Alain Badiou’, *Actuel Marx*, 28 (2000), 39–54 (p. 47).

important contribution to the study of those strange internal realities which are both organised and organising [...] of those contradictory tensions of freedom and inertia which are known as *structures*.<sup>84</sup> Sartre distinguished '[t]he abstract point of view' of his critique from the detached logics of the sociologist and ethnographer,<sup>85</sup> subordinating Lévi-Strauss' notion of social structure to 'genuinely free human relations (undertakings, pledges, powers, rights and duties, etc.).'<sup>86</sup> Sartre argued that every human being initially 'finds himself to be pledged' in the sense that she or he is born 'a free common agent who has been granted his freedom', that physical birth must be 'reproduced *artificially*' in a baptism or initiation ritual that is her or his 'social birth', and that this '*second pledge*' explicitly establishes a reciprocal commitment in which the group takes responsibility for the freedom of all its members and each member accepts the constraints of the group's ethical values (such as exogamy).<sup>87</sup> Crucially, the specific form of social structure affirmed through the representative pledge is continuously a matter of free conscious choice: a group always chooses a form of organisation from the finite possibilities available to it at every moment. This is why, Sartre contended, it is always possible for the group to consciously 'dissolve' a particular form of totalisation, since it only serves this purpose as long as the group of social actors continue to use it.<sup>88</sup> The Sartrean pledge has a historicising function because it introduces an ethical mode of totalisation that inaugurates the organisation of a sequence of concrete events that belong to the finite time of the pledge (however brief this may turn out to be) and which are therefore irreducible to their place in the causality of natural time.

This deserves attention because Badiou's formalist conception of social structure might be assumed to have no historical dimension of its own. Two remarks about the term 'historical' in Badiou's '*theory of historical sets*' (RDM 163) will prepare subsequent chapters and serve as an introduction to the final section of this chapter. The question of the historical existence of sets went beyond the scope of 'The (Re)commencement of Dialectical Materialism', where Badiou only indicated: 'Epistemology is the theory of the history of the theoretical'. (RDM 145) This is

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<sup>84</sup> Sartre, *Critique of Dialectical Reason, Volume 1: Theory of Practical Ensembles*, trans. by Alan Sheridan-Smith, ed. by Jonathan Rée (London: Verso, 2004) [1960], p. 480.

<sup>85</sup> Ibid., p. 482, n. 41.

<sup>86</sup> Ibid., p. 485.

<sup>87</sup> Ibid., p. 485–87.

<sup>88</sup> Ibid., p. 489.

developed in *Concept of Model* in terms of the logical time in which mathematical models are hypothesised and verified:

Reciprocally, the conceptual historicity, which is to say the ‘productive’ value, of formalism comes to it both from its theoretical subordination as an instrument, and from what it has as models: from what it doubly incorporates into the conditions of production and reproduction of knowledge. Such is the *practical* guarantee of formal assemblages.

The category of model thus designates the retroactive causality of formalism on its own specific history, the history conjoining object and use. And the history of formalism will be the anticipatory intelligibility of that which it retrospectively constitutes as its model.

The problem is not, and cannot be, that of the representational relations between the model and the concrete, or between the formal and the models. The problem is that of *the history of formalisation*. ‘Model’ designates the network [*réseau*] traversed by the retroactions and anticipations that weave this history: whether it be designated in anticipation, as break [*coupure*], or in retrospect, as remaking [*refonte*] (CM 54)

The category of time is here the transcendental form of pure mathematical intuition: within it mathematical models are prescribed by hypothesis and verified or disqualified in laborious mathematical construction. Above all else, what separates this calculating time from lived experience is its bi-directionality. Upon reaching an impasse, logical machines return to their point of origin, axiomatically supplement their alphabet and relaunch. In this realm, historical time has nothing to do with empirical events at all, it is defined step by step, made to exist instance by instance in pure mathematical space.

As previously mentioned, Badiou’s ‘*theory of historical sets*’ decides that, fundamentally, the reality underlying historical effects is pure mathematical multiplicity. However, this is a theoretical resolution to an antinomy (the second of Kant’s mathematical antinomies) and is therefore distinct from the practical resolution of antinomies recommended by Kant and developed by Lévi-Strauss. Towards the end of ‘The (Re)commencement of Dialectical Materialism’ Badiou salutes the theoretical security guaranteed by ‘the pure *fact* of science’; what Kant described as ‘a *revolution*, brought about by the happy inspiration of a single man in an attempt from which the road to be taken onward could no longer be missed, and the secure course of science was entered on and prescribed for all time and to an infinite extent.’<sup>89</sup> Althusser, like Kant, Badiou claimed ‘sidesteps the problems of the guaranteeing, of the “policing” of

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<sup>89</sup> Kant, *Critique of Pure Reason*, p. 107–8.



the true' (RDM 169). It is to Badiou's approach to this in *Concept of Model* that we now turn.

#### MODEL, TRUTH AND THE DIVISION OF PHILOSOPHY

In the final section of this chapter I will discuss Badiou's introduction to model theory in *Concept of Model* (1969) as a demonstration of the formal autonomy of science. The first five chapters of the book were presented in a seminar of Althusser's Philosophy Course for Scientists on 29 April 1968. The second seminar, scheduled for 13 May 1968, never took place, however, the material was published in early 1969 as chapters six to ten of the book. The Foreword (dated December 1968) announced that it was a project that had been 'happily interrupted' by the political upheaval of May '68 and therefore belonged to a 'bygone conjuncture', however it nevertheless warranted publication as 'a document and a landmark.' (CM 3) The mathematical core of the text is certainly separable from the Althusserian context in which Badiou produced it. In particular, chapters 6–8, which are presented almost exclusively in terms of mathematical logic and without reference to Althusser's notions or texts.<sup>90</sup> However, it is precisely the envelopment of this kernel by opening polemics and closing reflections that makes the text philosophically problematic.

I will argue that Badiou's use of model theory in *Concept of Model* is limited in two ways. Firstly, although Badiou expounds classic model theory, in which research into mathematical models was temporarily allied with research into set theoretical foundations, this was no longer the case when Badiou published *Concept of Model*. Secondly, his claim that formalization is the *style* of 'proletarian' writing is problematic because it implies that formalization is the mark of a political subject, however, this is not discussed in *Concept of Model*, and it is hard to see how, as the mark of a subject, the formalization of the practical immanence of logic to mathematics presented in the text could be anything more than a mark of withdrawal from the practical sphere of politics to the purely intellectual space of mathematical forms.

Model theory is a branch of mathematical logic which demonstrates correct reasoning through valid interpretation: a mathematical model is a construction in a circumscribed mathematical domain (such as set theory, group theory, graph theory)

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<sup>90</sup> There are only three references in these chapters: Bachelard's notion that 'in physics, the true principle of identity is that of the identity of scientific instruments' (CM 26); that we 'experience' [*expérimentons*] Aristotle's principle of non-contradiction 'in the field of concrete mathematical production' (CM 33–34); and Bourbaki's claim that mathematics 'is the theory of *species of structure*.' (CM 35)

whose correspondence with a set of logical theses proves that the theses are true for that domain of interpretation. Wilfrid Hodges' elegant expression of the basic notion of model theory is worth recalling: '*a formula  $\phi$  being true under an interpretation  $I$ .*'<sup>91</sup> This establishes a mathematical semantics, and therefore goes beyond the purely logical process presented in 'Mark and Lack', which deals exclusively with the process of syntactical derivation in a formal system (such as the calculus of identity). Model theory provides valid mathematical interpretations of formal systems by defining correspondences between logical statements and mathematical structures. The correspondence function is key. In Hodges' formulation above, correspondence is expressed as 'being true' in the Tarskian sense of truth as 'satisfaction'. Mathematical structures are models of logical formulas if they 'satisfy' the formulas. Satisfaction should here be taken to be close to the Latin root 'to content'; and the contenting activity to be the prescription of mathematical values that satisfy logical forms.

In the first part of this section I will demonstrate that, although Badiou prefers the (Lacanian) term 'transference' [*transfert*] (CM 30) to 'satisfaction' to describe the model-theoretical interpretation, in the end, his exposition of standard model theory simply presents Tarskian truth in other terms.

In *Concept of Model* Badiou provides a rigorous exposition of classic model theory which takes the 'domain of objects' to be set theoretical (CM 29). He therefore affirms *a* model theory of sets, specifically the model theory of Zermelo-Fraenkel set theory with the axiom of choice (ZFC) (CM 46). Although this variant of model theory was not at the cutting edge of research in the area the 1960s, it lent itself to Badiou's polemic against positivism because, at the time, ZFC was widely regarded as the foundational discourse of mathematics, and therefore model theoretical research into the foundations of ZFC could serve as a paradigm for a formal theory of dialectical materialism. The assumption behind this, which was widely held by model theorists prior to 1950,<sup>92</sup> is that every logical system 'speaks about' a region of ZFC set theory and that, ultimately, all logical systems are prescribed by the materiality of the universe of ZFC set theory. In this sense: 'Semantics is realist' (CM 45). This approach also supposes a continuous double articulation in which the semantic domain envelops the

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<sup>91</sup> Hodges, Wilfrid, 'Model Theory' (unpublished draft, July 2000)  
<<http://wilfridhodes.co.uk/history07.pdf>> [Accessed 15 October 2014], p. 1.

<sup>92</sup> Hodges, 'Model Theory', p. 32.

syntactical systems it prescribes. Badiou calls this the ‘dialectical materialist’ approach to model theory for which:

‘Model’ designates the conceptual articulation, insofar as it is related to a particular experimental apparatus: a formal system. ‘Formal system’, then designates the experimental articulation, or inscription. There is an envelopment of articulation-2 by articulation-1: the intellection [*l’intelligence*] of formal assemblages is deployed within the conceptual practice of mathematics itself. (CM 50)

This supposes that logic articulates a system-object which speaks about sets, and that mathematics is an object-system which prescribes the signifying materials. Were this the case it could legitimately be claimed that the universe of ZFC set theory is the purely autonomous realm of science.

To see how Tarskian truth operates in Badiou’s account we need to start with Badiou’s account of ‘correspondence’ in model theoretical technique, which I will quote in full:

The fundamental requirement will be the following: that once the rule of semantic correspondence is constructed, every *derivable* statement of the system (every theorem) must be linked to a *true* statement in the domain of interpretation. ‘Truth’, here is nothing but the partitioning of scientific statements, accomplished through the *labour* of concepts, into two classes: true statements (demonstrated or proven, or any other scientifically assignable form of evaluation), and false statements. Semantics aims to show that one can retrospectively organise this partition through purely mechanical, and entirely controllable, procedures, which are brought into play in a formal system.

If one can effectively assign a ‘true’ statement to every derivable statement, then the domain of interpretation is said to be a *model* for the formal system.

The reciprocal property is stronger: to every true statement of the model corresponds a derivable formula of the system. In this case, the system is said to be *complete* for the model (CM 19–20)

What Badiou calls ‘truth’ here is distinct from denotation, the ‘ideologico-philosophical’ concept of truth operative in logical positivism. He initially made a remark about this in ‘The (Re)commencement of Dialectical Materialism’:

The formal theory of denotation and more generally the formal semantics developed in Anglo-Saxon logical empiricism provide us, in my eyes, with the framework for a structural analysis of *ideology*. Naturally, for Carnap, semantics is a theory of *science*: this is because logical empiricism is itself an ideology. (RDM 148, n. 26)

On Badiou's account, Carnap's semantics articulates 'the rules of correspondence between formal *calculation* and concrete *measurement*' (CM 20). For Badiou's Carnap, the truth-value of logical statements can be decided 'insofar as phenomena can be measured. Measurement, through which facts become numbers, is here an essential semantic operation.' Using numbers to refer to empirical objects, Badiou concludes, appropriates mathematics in the 'vulgar epistemology' of the form/fact correlation.

What Badiou doesn't mention is that, since the late-nineteenth century, mathematical logic has distinguished two kinds of truth-value: *denoting* and *having values*.<sup>93</sup> Historically, this was important because the having-values approach is fundamental to non-referential semantics in mathematical logic. The root of Carnap's semantics is Frege's theory of denotation in 'On Sense and Reference'<sup>94</sup> in which he established denotation as the function of equivalence between a proper name and a referent. It is standard to translate Frege's German term *bedeuten* as 'to denote' or 'to name'. Alonzo Church provides a useful summary of how this serves as the basis for semantics in logical positivism: 'The most conspicuous aspect of its meaning is that a proper name always is, or at least is put forward as, a *name of* something.'<sup>95</sup> In 'On Sense and Reference' Frege was particularly concerned with the distinction between formalized languages and natural languages. Church summarises the key difference as follows: in formal languages, the condition of univocity requires that 'every name should have just one sense',<sup>96</sup> ruling out 'an *oblique* [*ungerade*] use of the name' that 'natural languages customarily allow'.<sup>97</sup>

Now, if the principle of one name one sense is maintained (as it must be to avoid contradiction) then denotation will clearly be of little use for interpreting propositional forms with free variables. Truth in the sense of *having values* is required. Church once more: 'A form whose values are truth-values (and which therefore becomes a sentence when its free variables are replaced by appropriate constants) is a *propositional form*. Usage sanctions this term rather than "truth-value form," thus naming the form rather by what is expressed, when constants replace the variables, than by what is denoted. A

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<sup>93</sup> According to Alonzo Church, this can be traced back to a paper by C.S. Pierce published in 1885. Cf. *Introduction to Mathematical Logic*, vol 1 (Princeton: Princeton University Press, 1956), p. 25, n. 67.

<sup>94</sup> Frege, Gottlob, 'On Sense and Reference' [1892], in *Translations from the Philosophical Writings of Gottlob Frege*, trans. and ed. by P. Geach and M. Black (Oxford: Blackwell, 1980), pp. 56–78.

<sup>95</sup> Alonzo Church, *Introduction to Mathematical Logic*, vol 1, p. 4.

<sup>96</sup> *Ibid.*, p. 7

<sup>97</sup> *Ibid.*, p. 8.

propositional form is said to be *satisfied* by a value of its free variable, or a system of values of its free variables, if its value for those values of its free variables is truth.<sup>98</sup>

It is precisely this type of truth-value that, from Tarski onwards, is central to model theory, Badiou's exposition included. However, Badiou makes no reference to the classic text of model theory—Tarski's 'The Concept of Truth in Formalized Languages'.<sup>99</sup> Nor does he present correspondence explicitly in terms of truth as 'satisfaction'. Instead Badiou talks of 'transporting' [*transportant*] or the 'transference' [*transfert*] of a logical 'hierarchy' onto a mathematical one (CM 30). The deductive rules of the correspondence function, he tells us, 'transfer [*transportent*] validity' by regulating how a formal system is 'valid-for-a-structure', where a 'structure' is a non-empty set (CM 34, 29).

Validity-for-a-structure is Badiou's alternative phrase for Tarskian satisfaction. On the side of logic, Badiou calls a propositional form 'an open formula', a '*closed instance*' of which is one where all the variables have been replaced by constants (CM 32). The closed instances which preserve the axioms of the system (i.e. the valid ones) are then made available for correspondence with a domain of sets. According to Badiou's presentation, this involves experimenting with rules for mapping the domain of valid closed instances onto the 'objects' belonging to a well-defined set theoretical structure. If the original axiomatic validity of the logical system is preserved in this mapping, then validity-for-a-structure obtains and a set theory model has been deduced.

Finally, Badiou's account of 'validity-for-a-structure' does involve the ascription of binary values to closed instances. Although in the core of his presentation he prefers to talk about marking a closed instance 'Vri' or 'Fax' rather than simply saying it has truth-value 'true' or 'false', in the Appendix he does say that 'Vri' and 'Fax' are values. This occurs in some introductory remarks to a demonstration of pure 'L-validity' (logical validity) in a predicative system. He remarks: 'If it is not L-valid there exists a structure in which a closed instance of this axiom takes the value Fax.' (CM 57) When introducing the binary values 'Vri' and 'Fax' in the core of the book Badiou warns:

One may read these marks, if one wishes, as 'true' and 'false' [*vrai et faux*]. But this appellation, where we hear the resonance of semantics' intuitive (that is ideologico-

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<sup>98</sup> Ibid., p. 28.

<sup>99</sup> Tarski, Alfred, 'The Concept of Truth in Formalized Languages' [1933], revised trans. by J. H. Woodger, in *Logic, Semantics, Metamathematics* (Indianapolis: Hackett, 1983), pp. 152–278.

philosophical) origin, is inessential, even parasitic. All that counts here is the permanent impossibility of confounding the two marks, the invariance of the principle of coupling of which they are the inscribed experience (CM 30)

However, it remains unclear what is gained by deciding not to use the binary true/false here when truth in the sense of having values already exists as the clear alternative to the ideology of denotation.

I will now turn to the limitation of Badiou's use of ZFC model theory for articulating mathematical reality.

*Concept of Model* defends standard model theory in the sense that it restricts model theoretical correspondence to a single concept of structure (set). The root of this position is Tarski's 'The Concept of Truth in Formalized Languages' (1933), one of the main aims of which was to show that for certain formal systems all that is required to demonstrate that a structure satisfies a formula is some basic mathematical material (sets), a well-defined syntax, and the concepts expressed by the constants of the system.<sup>100</sup> If one assumes, as Badiou does, that the formal systems under consideration are ones whose axioms are results of previous set theoretical verification, then the syntax and constants are set theoretically sourced as well. Badiou makes this explicit at the beginning of chapter 9:

The clearest lesson of our detour is that the construction of the concept of model is strictly dependent, in all of its successive stages, on the (mathematical) theory of sets. From this point of view, it is already inexact to say that the concept of model connects formal thought to its outside. In truth, the marks 'outside the system' can only deploy a domain of interpretation for those of the system within a *mathematical envelopment* which preordains the former to the latter. (CM 42)

The universality of this mathematical envelopment depends on the existence of either a universal concept of structure or structurality. In Badiou's prudent estimation this entails using 'the most general, the most enveloping, of theories at our disposal: set theory (or now category theory).' (CM 44) Of course, these two are not the same. Set theory's claim to be the foundation of mathematics rests on the supposition that all mathematical objects are intelligible as collections of sets. As a set, an object is defined in terms of its 'contents', i.e. in terms of the sets which belong to it. By contrast, category theory treats objects as points (rather than collections of elements) and thinks the relations between objects (including that of an object to itself). In this sense,

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<sup>100</sup> Hodges 'Model Theory', p. 2.

category theory is more general than set theory, and since the mid-twentieth century the question of whether category theory is more foundational than set theory has been a hotly debated topic. On this point, Badiou has maintained the Grothendieckien view that he first expressed in ‘The (Re)commencement of Dialectical Materialism’: that category theory should be developed on the basis of the underlying set-theoretical nature of mathematical objects. This remains the case in *Logics of Worlds*, as we will see in chapter 4. In *Concept of Model*, Badiou’s interest in the category of model is focused on its ability to think the retroactive truth of formal theses on the basis of set theoretical models. To this end, his interest in category theory is limited to the categories of set and model, and specifically the way in which sets serve as models for the purpose of verifying theses. Since he also takes the view that mathematical material ‘preordains’ logical articulation, he views the category of model as an intra-mathematical instrument.

Far from indicating an outside of formal thought, the theory of models governs a dimension of the sciences’ *practical immanence*—a process, not only of the production of knowledge, but of the reproduction of the conditions of production. (CM 44)

To sustain this mathematical envelopment, model theory must do more than show validity-for-a-structure, it must demonstrate ‘completeness, for a system’ (CM 46). Of course, this does not mean that set theory as a whole will be demonstrated to be complete for a logic, but rather, on a case by case basis, and under the conditions of a circumscribed set theoretical region in which the model is defined, ‘the system is said to be *complete* for the model’ (CM 20). As Badiou observes, ‘its demonstration requires one to be able to well-order *all* the correct formulae of the system, which, in general, requires a very strong set-theoretical proposition: the axiom of choice.’ (CM 46). And this can only be done in what is by convention the strongest (most decisive) set theory: Zermelo-Fraenkel set theory with the axiom of choice (ZFC), which, Badiou reminds us, is ‘*a* set theory, for we have known since the work of Cohen that the axiom of choice is independent of the other axioms, so that it is possible to construct a set theory where the axiom is explicitly negated.’ (CM 46) I will address the pragmatics of this convention shortly.

Looking back, it is clear that Badiou’s confidence in model theory lagged behind research in the area at the end of the 1960s. After 1950, it became increasingly clear that the application of model theory in this direction was limited, and by 1970, it had become clear that other techniques, such as Cohen forcing (from 1963), could explore regions that remained off-limits to model theory. In its heyday (between the mid-1930s and the late 1940s), a widely-held belief amongst logicians and mathematicians was that

the application of model theory to set theoretical structures progressively articulated the foundations of mathematics. However: ‘Though few would have predicted it, this proved to be only a temporary alliance. In the early 1970s something of a revulsion against combinatorial set theory began to express itself among model theorists.’<sup>101</sup> In 1950 Tarski and Robinson expressed doubts about the general applicability of model theory,<sup>102</sup> and by 1970 it was widely accepted that model theory is not applied to mathematics from the standpoint of some logical outside at all since it is itself an entirely submerged region of mathematics.<sup>103</sup> At which point it is more precise to say that model theory stages logic ‘speaking about’ mathematics when in fact what is really going on is mathematics is ‘speaking about itself’ through a logical device. This shift encouraged experimentation with other categories of model. Nevertheless, the basic limitation of standard model remained: it cannot help with research into mathematical inconsistency since it can only produce interpretations that are valid-for-a-structure if the structure is already known to be regulated by prescribed axioms. As a rule, standard model theory is unable to help with the laborious task of articulating inconsistency, most famously, non-constructible set theoretical spaces. As Hodges has remarked: ‘The one exception to prove the rule was Shelah, who brought in theorems of Fődor and Solway as essential tools of nonstructure theory, and invented proper forcing for applications in model theory.’<sup>104</sup> If standard model theory can be applied to inconsistent spaces at all it is only after inconsistent spaces have been forced to consist by other means.

It is worth comparing Badiou’s use of the category of model to that of Michel Serres, who Badiou interviewed on the topic for a television program broadcast in January 1968.<sup>105</sup> Serres was ahead of Badiou insofar as he recognized the limitation of binding logic to a single domain of mathematical interpretation. In response to a hasty

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<sup>101</sup> Hodges, ‘Model Theory’, p. 34.

<sup>102</sup> At the 1950 International Congress Robinson advised: ‘contemporary symbolic logic can produce useful tools—though by no means omnipotent ones—for the development of actual mathematics’ (Cf. Hodges ‘Model Theory’, p. 32)

<sup>103</sup> ‘In fact the idea of “applying model theory to actual mathematics” was already growing rusty by 1970. By that date most model theorists regarded model theory itself a part of actual mathematics. And in any case the natural ebb and flow of mathematical research throws up much subtler relationships than “applying area *X* in area *Y*”. For example two areas may overlap; questions or methods of common interest form a weak overlap, and a stronger overlap is where the same researchers place themselves in both fields.’ (Hodges, ‘Model Theory’, pp. 33–34)

<sup>104</sup> Hodges, ‘Model Theory’, p. 34.

<sup>105</sup> Serres, Michel, and Alain Badiou, ‘Model and Structure’, parts 2 and 3 (Broadcast 16 and 23 January 1968), in *Badiou and the Philosophers*, pp. 111–138.



statement by Badiou regarding the immanent development of mathematical models, Serres pointed out: ‘Sometimes to understand a given phenomena, we bring it under models which come from a theoretical field different than the phenomena being studied.’<sup>106</sup> For Serres, the concept of model exemplified Leibnizian ‘fidelity’, namely, how one structure preserves relations present in another, and how this can serve as the basis for a theory of structural translation between a broad range of discourses that includes sciences (both formal and empirical), art and myth. Badiou’s enthusiasm for standard model theory in 1969 drew instead on the notion that set-theoretical models are perfectly autonomous from the positivist ideology of the empirical sciences. Badiou’s outdated view that logic has priority over mathematics in experimental model theory was not only due to the fact that he hadn’t read the most recent Anglophone research in the area, but also because he didn’t read Albert Lautman until a collection of his writings were published in France in 1977.<sup>107</sup> In his thesis, written in 1938, Lautman doubted the priority of logic and anticipated a return to a more Platonist prioritization of mathematical form: ‘true logic is not *a priori* in relation to mathematics but that for a logic to exist a mathematics is necessary’.<sup>108</sup> There is also no evidence that Badiou engaged with Jean-Toussaint Desanti at this time either, whose *Les idéalités mathématiques* (1968) argued against the privileging of any single epistemological standpoint.

The second limitation of Badiou’s use of model theory concerns his philosophical appropriation of it.

There is a symptomatic oscillation of terminology in the place of truth in *Concept of Model*; to summarize:

- Chapters 1 to 5: Badiou’s initial rejection of ‘empirical verification’ (CM 14), and his non-acceptance of the term ‘truth’ which is marked with scare quotes (CM 19).
- Chapters 6 to 8: Badiou’s preferment of the terminology of mathematical strength to mathematical truth (validity rather than veridicality) in his demonstration of model theoretical technique.

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<sup>106</sup> Ibid., pp. 123–4.

<sup>107</sup> Badiou, Alain, ‘The Concept of Model, Forty Years later: An Interview with Alain Badiou’ [Interview with Tzuchien Tho], in *Concept of Model*, p. 82.

<sup>108</sup> Lautman, *Mathematics, Ideas and the Physical Real*, trans. by Simon B. Duffy (London: Continuum, 2011) [1977], p. 109.

- Chapters 9 and 10: Badiou's reversion to the terminology of verification in his philosophical categorisation of the 'scriptural rigour' and 'technical control' of model theoretical semantics (CM 42).

This oscillation suggests some equivocation on Badiou's part regarding the status of truth. Concerning the model theoretical core of the text, we have seen that truth as 'having values' is operative. However, this is a clear departure from Badiou's position in 'Mark and Lack', since verification of values (validity-for-a-structure) requires a conventional domain of structure (e.g. ZFC set theory) to be used as the mathematical 'workspace' (CM 46). We have also seen that *Concept of Model* does not problematize this normative choice. In my view, Badiou's willingness to utilize a slightly outmoded version of model theory in *Concept of Model* boils down to its suitability for thinking the purity of 'proletarian' logic, which, for Badiou at the end of the 1960s, meant being able to demonstrate its absolute autonomy from the domain of objects.

Ultimately, Badiou puts model theory in the service of what he calls 'proletarian' philosophy, which, in *Concept of Model*, is defined as the negative of 'bourgeois' philosophy, i.e. logical positivism. According to Badiou, while logical positivism establishes truth value by verifying formal models with empirical data, the alternative philosophical (or 'categorical') use of the concept of model is resolutely formalist, and this 'readies its effective integration into proletarian ideology' (CM 48). This effectively divides philosophy in two: philosophy related to objects and philosophy without objects. Of course, the consistency of the latter must be demonstrated without external reference, and in this regard, model theory is paradigmatic. In *Concept of Model*, philosophy is divided in two, with the distinction made at the level of the philosophical appropriation of science: there are 'two antagonistic styles of discourse on science' (CM 22). While logical positivism sutures mathematical logic to the domain of empirical objects, Badiou successfully demonstrates the independence of model theory from that realm, and therefore makes it available for 're-appropriation' by a different, apparently more 'progressive' philosophy (CM 22).

This division of philosophy is, of course, polemical. Badiou's main criticism of logical positivism in *Concept of Model* is that it takes the link between form and fact as a natural correspondence when it is never anything more than a conventional choice. His criticism of Quine illustrates the point: 'For Quine, in fact, to admit variables into a logical calculation is to produce a law over the constants that these variables take as values. And the constants are fixed only insofar as they are capable of denoting concrete objects.' (CM 6) Nevertheless, Badiou affirms Quine's famous ontological prescription

(CM 6): ‘to be is to be the value of a variable’.<sup>109</sup> The difference is that, for Badiou, what gives values to variables is sets, not objects. As Badiou would no doubt concede, substituting the universe of sets for the physical universe of concrete objects does not mean that the choice of set theoretical values is any less a conventional choice. In short, philosophy is faced with a choice pure and simple: things or sets. While the former lends objective meaning to formal models, the latter insists on the autonomy of a formalist semantics.

Although we should treat Badiou’s simplification of logical positivism, and especially Carnap’s philosophy, with caution, he is right to point out that nothing prevents positivist philosophy from appropriating mathematical logic: ‘If logical positivism has been able to propose a doctrine of science constantly propped up by mathematical logic, this is, among other things, because the concept of model allows it to think the relation between a formal system and its “natural” exterior.’ (CM 18). Against this, *Concept of Model* clearly sets out a formalist alternative which articulates the intra-mathematical relation between formal systems and the ‘natural’ interior of set theory. This immanent articulation not only characterizes Badiou’s anti-positivism but also his anti-humanism: with Kant, Badiou affirms that the discovery of pure mathematics is humanity’s greatest intellectual achievement, but with Spinoza and against Kant, he insists that human participation in this realm does not define the formal transcendence of human thought relative to a natural exterior, but rather the limited but direct participation in nature itself.

Ultimately then, the philosophical appropriation of mathematical logic advocated in *Concept of Model* unreservedly affirms the autonomy of pure mathematical thought; specifically, its ability to demonstrate universal truths independently from worldly relations. However, the obvious problem with taking this as exemplary of the thought of the revolutionary class is that it does not include the role of a subject. Furthermore, it is hard to see how a mode of thought that is absolutely subtracted from worldly relations can serve as an example for revolutionary thought aimed at constructing a new form of existence in the world.

As we will see in subsequent chapters, although during the 1970s Badiou prioritized the concrete existence of Khmer communism over the abstract purity of mathematical universality, he returned to the latter in the 1980s after it had become

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<sup>109</sup> Quine, W.V.O., ‘On What There Is’ [1948] in *From a Logical Point of View: 9 Logico-philosophical Essays* (Cambridge MA: Harvard University Press, 1963), p. 1–19.

clear that Maoism had failed. Pure mathematics not only persists in the broad trajectory of Badiou's thought but remains central to it because its truths are properly universal: in principle, they can be reconstructed by anyone, anywhere, anytime.

Although Badiou doesn't say so, this confidence in the universal intelligibility of mathematical truths means that the philosophical orientation of *Concept of Model* is Platonic. *Concept of Model* was 'a great success', especially as a popular textbook introduction to model theory;<sup>110</sup> accessible and lucid, its mode of address could not be further from the fragmentary language and verbose style of *Almagestes*. Although *Concept of Model* adopts a more didactic approach than Socrates in *Meno*, it directs the reader pedagogically through the steps required to recount a mathematical proof without presupposing any previous experience in formal logic. This confidence in the intelligibility of mathematical writing can be usefully contrasted with the ideals of Barthes' degree zero and Lacan's mathemes.

For Barthes, the 'zero degree' of *écriture* is the ideal in which the objectifications of language and style typical of bourgeois writing would finally be dissolved. In *Writing Degree Zero* (1953), Barthes celebrates the effort writers like Raymond Queneau whose search for a 'non-style or an oral-style' is 'the anticipation of a homogenous social state', even though they know that this cannot be achieved before the 'universality of society'.<sup>111</sup> In *Mythologies* (1957), Barthes explains how myth restores the contrivance of motivated signification to this form of anticipated universality. Even when non-style is taken to the extreme—where the conventions of purposeful and well-organised writing are avoided—'what the form can always give one to read is disorder itself.'<sup>112</sup> In Barthes analysis, myth is equally successful at appropriating the opposite extreme, mathematical writing. Although it is impossible to distort because 'it has taken all possible precautions against *interpretation*', myth simply 'takes it away en bloc; it takes certain mathematical formula ( $E=mc^2$ ), and makes of this unalterable meaning the pure signifier of mathematicity.'<sup>113</sup> In *Concept of Model* Badiou also admits that pure mathematical writing can be read as it is by proletarian ideology; the difference is that this appropriation is not presented as the

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<sup>110</sup> Badiou, 'The Concept of Model, Forty Years Later', p. 81.

<sup>111</sup> Barthes, *Writing Degree Zero*, p. 93.

<sup>112</sup> Barthes, *Mythologies*, trans. by Annette Lavers (London: Vintage, 2009) [1957], p. 151.

<sup>113</sup> *Ibid.*, p. 157.

inevitable corruption or even ‘death’ of ‘a *finished* language’,<sup>114</sup> but simply as active participation in universal language.

Lacan had a long-standing interest in mathematics and its influence on his thought is clear at least as early as 1945, when he published ‘Logical Time and the Assertion of Anticipated Certainty’. In ‘The Instance of the Letter in the Unconscious’ (1957), he used quasi-algebraic formulas ‘to define the topography of the unconscious’, and in ‘On a Question Prior to Any Possible Treatment of Psychosis’ (1957) he expanded on quasi-topological schemas, such as the L Schema, to posit ‘the scientific formulation of the subject’s relation to the other.’<sup>115</sup> In his seminar of 1972–73, *On Feminine Sexuality*, he introduced the term ‘matheme’ to designate these symbolizations, what he had previously called ‘indices of an absolute signification’.<sup>116</sup> In essence, mathemes are the formal anchors of verbal discourse and, even though they are intrinsically meaningless they allow a multiplicity of verbal interpretations ‘as long as the spoken remains caught in their algebra.’ Strategically, mathemes provided Lacan with a means to mark the ideal form of key concepts of psychoanalytic discourse, especially ones that he wished to interpret afresh. During a reinterpretation, the profusion of references to previous conceptualizations and other discourses inevitably compromises the purity of the matheme. As Jacques Alain Miller has put it: ‘The matheme’s privilege resides in the fact that it is fundamentally the zero of reference.’<sup>117</sup> The point of a matheme is to show that the hole in discourse can be indexed by a mark that remains irreducible to interpretation. Although in *Concept of Model* Badiou remarks that ‘[w]e mustn’t lose sight of Lacan’s fundamental thesis regarding the materiality of the signifier’ (CM 43), he demonstrates that, within the formalism of model theory, pure discourse without external reference is nevertheless a full experience of ‘the discrete materiality of marks’: the inscription of the ‘proper finitude’ of a formal system (CM 71). Also, we have seen that in Badiou’s exposition of model theory, unlike a matheme, which is ‘designed to allow a hundred and one different readings’,<sup>118</sup> the

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<sup>114</sup> Ibid., p. 158.

<sup>115</sup> Lacan, *Écrits*, pp. 428, 458.

<sup>116</sup> Lacan, Jacques, *On Feminine Sexuality, The Limits of Love and Knowledge*, trans. by Bruce Fink and ed. by Jacques-Alain Miller, *The Seminar of Jacques Lacan: Book XX, 1972–1973* (New York: Norton, 1999) [1975], p. 110; *Écrits*, p. 691.

<sup>117</sup> Miller, Jacques-Alain, ‘Mathemes: Topology in the Teaching of Lacan’, trans. by Mahlon Stoutz, in *Topologically Speaking*, ed. by Ellie Ragland and Dragan Milovanovic (New York: Other, 2004), p. 41.

<sup>118</sup> Lacan, *Écrits*, p. 691.

purpose of a logical thesis is to anticipate a true interpretation in a chosen domain of mathematical material.

To conclude, *Concept of Model* clearly articulates the epistemological break that separates model theory from positivism. Materially, it limits the application of model theory to the domain of ZFC sets. This approach belonged to the conjuncture of model theory and set theory that was in the process of fragmenting at the end of the 1960s. From the 1970s onwards, logico-mathematical practice has demonstrated that the principle of model theory—‘*a formula  $\varphi$  being true under an interpretation  $I$* ’—is not limited to set theoretical structures. That model theory flourishes when applied to different mathematical structures (e.g. graph theory, group theory, field theory) is no surprise because its correspondence function uses a prescribed mathematical structure to ascribe truth value to a logical system. The conventional choice of prescribed structure is always made before model theoretical work begins. Therefore, experimentation with different kinds of structure can be expected to yield interesting results. By carefully avoiding the concept of truth as having values in his exposition of the correspondence function and asserting the envelopment of model theory by set theory, Badiou could insist on the coupling of model theory with set theory. However, as I have shown above, evidence of the conventionality of this choice remains. This narrow model theoretical orientation supports the philosophical orientation of *Concept of Model*, namely that truth is intelligible without reference to objects and without the function of a subject. We now turn our attention to how the consequences of May ’68 changed Badiou’s mind on this fundamental point.

## From the Midst of the Tempest to the Virtue of Mathematics

The principal aim of this chapter is to understand why Badiou returns to mathematical logic after the failure of Maoism in the mid- to late-1970s. I will argue that in *Theory of the Subject* Badiou recasts the uncompromising logic of his political theory of the mid-1970s and supplements it with the virtue of pure mathematical thought. I will show how the Lacanian concept of anxiety is pivotal to this shift. Specifically, I will argue that the logic of history in Badiou's political pamphlets of the mid-1970s is best understood as a logic of anxiety, and that the essential theoretical move of *Theory of the Subject* is the intellectual passage through anxiety with the support of mathematical idealities.

This chapter has five sections. The first section will outline the trajectory of Badiou's political theory from the early-1970s to the early-1980s. In the second section I will discuss Badiou's recasting of structural permutation as the underlying principle of revisionism in the 1970s. I will show that he shifts to a more occasionalist conception of causality. In the third section the focus is on the formal power of class leadership [*direction*] as Badiou conceives it in the 1970s. I will also demonstrate that the strident dialectic of history he defends in the 1970s is based on the formal power of classical negation, and that, at best, this logic prescribes the possibility that history is a process with a vanishing subject. In the fourth and longest section I address the question of how, after the disappearance of revolutionary politics at the end of the 1970s, Badiou works out a theory of the formal permanence of the subject of history by passing through the Lacanian concept of anxiety. The aim of the fifth and final section is to show that the concept of mathematical force in *Theory of the Subject* is not overdetermined by political practice in the way that Bruno Bosteels claims, and that instead it serves as a formal support for thinking prescriptive politics in the post-revolutionary context.

The main texts under consideration in this chapter are the two political pamphlets that Badiou wrote and co-authored in the mid-1970s— *Théorie de la contradiction* (1976) and *De l'idéologie* (1976)—and *Theory of the Subject* (1982). The pamphlets belong to *Collection 'Yenan'* which was published by Maspero between 1972

and 1978 and which Badiou co-edited with Sylvain Lazarus. *Collection 'Yenan'* was the theoretical organ of the Maoist group UCFML (*Union des Communistes de France marxiste-léniniste*), which Badiou cofounded with Lazarus and Natasha Michel between 1969 and 1970. Badiou cofounded the UCFML after a failed attempt at a Leninist subversion of the PSU (*Parti Socialiste Unifié*) with a different group of collaborators (Emmanuel Terray, Harry Jancovinci and Denis Ménétrety).<sup>1</sup> The UCFML declared itself a Leninist party of a new type, convinced that Maoism was the post-Leninist stage of Marxism and that politics was 'rooted in the experience, the universal bearing and the assessment of the Cultural Revolution.'<sup>2</sup> *Collection 'Yenan'* had three series: *Yenan Synthèses*, *Cahiers Yenans*, *Yenan Propositions et documents*. Badiou co-wrote the collection's editorial forewords and contributed several texts to the first two of the series, which contained original political theory and criticisms and interventions in a range of topics that spanned the relationship between Marxism-Leninism and psychoanalysis, economic revisionism, the transformations of capitalism, and the politics of French philosophies of the day. In the series *Yenan Synthèses* Badiou published *Théorie de la contradiction* (1976) and *De l'idéologie* (1976), co-authored with François Balmès, and a commentary accompanying Zhang Shiyong's *The Rational Kernel of the Hegelian Dialectic* (1978). In the fourth volume of *Cahiers Yenans* titled *The Current Situation on the Philosophical Front* (1977) Badiou authored four of the six collected texts: 'The Current Situation on the Philosophical Front' collectively signed Groupe Yenans-philosophie, 'The Flux and the Party: In the Margins of *Anti-Oedipus*' with his own signature, 'The Fascism of the Potato' and 'An Angel Has Passed' under the pseudonym Georges Peyrol.

By contrast, *Theory of the Subject* is a more systematic philosophical text. It consists of 'seminars' dated between January 1975 and June 1979. In the preface Badiou remarked: 'This ideal seminar—a mixture of an effective succession, some retroactions, supposed interpolations, and written compositions—certainly did take place. The present book is its second occurrence.' (TS xxxix) In my view, *Theory of the Subject* should be approached as the philosophical reiteration of a militant logic first presented in the pamphlets, a reiteration that includes significant differences.

Broadly speaking, from the mid-1970s through to the early-1980s, Badiou's

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<sup>1</sup> Bosteels, *Badiou and Politics*, p. 119.

<sup>2</sup> UCFML, 'Le Maoïsme: Une étape du marxisme', *Le Marxiste-Léniniste*, 50–51 (Spring 1981), p. 7; cf. Bosteels, *Badiou and Politics*, p. 119.



theory is an attempt to understand insurrection. The pamphlets and *Theory of the Subject* contain different accounts of insurrection after May '68. The presumption of the pamphlets is that there is a logic to insurrection and that this is also the law of historical development. The pamphlets also claim that the historical stage of post-Leninism is defined by proletarian consciousness of this logic and thus their ability to predict its conclusion, and that Maoism is the form of organisation which can apply this knowledge in practice. After the failure of the Cultural Revolution, *Theory of the Subject* rethinks insurrection as the permanent structural possibility of the decisive political act in which contingency is introduced into an otherwise deterministic logic through the affirmation of chance. However, this does not amount to an abandonment of the logic of history: instead it is repositioned as retroactive reason. The questions guiding my discussion of the texts in this chapter are: do these different accounts of insurrection involve mathematical logic? And, if so, is mathematical logic subordinate to political experience or does it direct political hypothesizing? To anticipate my conclusion: Although the logic of the pamphlets is avowedly formal and presented in terms that suggest mathematical influence, it is not an explicitly mathematical logic. The retroactive logic of *Theory of the Subject* is constitutively mathematical and is the distinctive form of intellectual virtue of Badiou's post-Maoism.

#### THE TEMPEST AND ITS EFFECTS

Thirty years after the 'event' Badiou understood 'May '68' as a transitional moment, 'an event belonging to precisely that time when we were passing from the old conception of politics to something else, so that, as a result, the name "revolution" wasn't the right name.'<sup>3</sup> It is an event, 'but one whose name is obscure.'<sup>4</sup> The desire to think the consistency of this 'something else' has directed Badiou's theoretical investigations ever since. Inevitably, Badiou's fidelity to an obscure yet energizing experience has theological overtones. In the mid-1970s he famously recounted the experience as a Pauline conversion. More recently he has used the metaphor of being 'struck by lightning'.<sup>5</sup> For Badiou, the immediate effect of this bolt from the blue was a

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<sup>3</sup> Badiou, Alain, 'Politics and Philosophy: An Interview with Alain Badiou' [Interview with Peter Hallward], in *Ethics: An Essay on the Understanding of Evil* (London: Verso, 2001), p. 126–7.

<sup>4</sup> Ibid., p. 127.

<sup>5</sup> Badiou, Alain, 'Jacques Rancière's Lessons: Knowledge and Power After the Storm', trans. by Tzuchien Tho and revised by Bruno Bosteels, in *The Adventure of French Philosophy*, ed. by Bruno Bosteels (London: Verso, 2012), p. 107.

shift from formal thinking to practical experience. ‘In 1967, just before the political storm, my meditations were on the side of formal structures. For the ten years following it, I was on the side of political subjectivity.’<sup>6</sup>

In the months after May ’68 Badiou initially tried to correct his hyper-Althusserian theoreticism by attempting to apply the principle of subversion to the PSU. The co-authored pamphlet *Contribution to the Problem of the Construction of a Marxist-Leninist Party of a New Type* (1969) is the document of this.<sup>7</sup> Interestingly, it was during this brief period that Badiou published *Concept of Model*. The editorial forward (dated December 1968) announces a shift from the ‘indirect’ approach of 60s to a more combative ‘style of working’ (CM 4, 3). What is striking is that, at that point in time, although action was recognised as the order of the day, there is no clear declaration of a theoretical break. In this sense, *Concept of Model* was a text that belonged to ‘a project that was happily interrupted’ (CM 3), but could be concluded at a later point. The foreword claims that although *Concept of Model* belonged to a ‘bygone conjuncture’, the point of publishing it at the beginning of 1969 was to make available ‘the angle from which the revival of “Dialectical Materialism”, in our eyes and from our point of view, might be pursued or consolidated.’ (CM 3, 4)

Badiou’s next signed publication was *Théorie de la contradiction*. Its introduction (dated August 1975) signals that in the intervening period, what Badiou initially experienced as interruption had intensified into a practical and theoretical conversion: ‘May ’68 and its effects have transformed from top to bottom the content and forms of the ideological struggle and the theoretical investigation. It is the masses that make history, including its knowledge.’ (TC 8) Following the foundation of the UCFML, a theoretical break followed: ‘This is what history—the class struggle—has decided, it is not appropriate to ignore fate [*le sort*]. To reprise and develop the epistemological themes in their pre-68 form today merely adds grist to the revisionist mill and its university branches. I admit without reticence that May ’68 was for me, in the philosophical order, and regarding everything else, a veritable road to Damascus.’ (TC 9)

*Théorie de la contradiction* is introduced as a text based on years of political experience. ‘As to the content, it ultimately comes from the historical experience of

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<sup>6</sup> Badiou, ‘Theory from Structure to Subject’, p. 280.

<sup>7</sup> Badiou, A., H. Jancovici, D. Menetrey and E. Terray, *Contribution au problème de la construction d’un parti marxiste-léniniste de type nouveau* (Paris: Maspero, 1969).

recent years, and more particularly from the decisive struggle within the worker movement between Marxism-Leninism and modern revisionism' (TC 7)

*As to the form*, it is marked by the immediate origin of these pamphlets: the courses and facts between 1969 and today. It is not about the philosophical intervention inscribed in a determined process of organization (as is, for example, a worker school of the UCFML), but about taking a position against the global ideological conjuncture, which has been dominated, since 1972, by a severe anti-Leninist, indeed anti-Marxist, counteroffensive. Our conviction, based on practice, is that today the Maoist worker vanguard is ahead of the intellectuals when it comes to the essential philosophical questions. (TC 7–8)

Badiou's ongoing confidence in the Maoist worker vanguard in 1976 distinguished him from fellow travellers who had given up at various points along the way. The pamphlet form encapsulates this confidence: up until the final issue of *Collection 'Yenan'* in 1978, Badiou and his co-editors published texts designed to equip this vanguard with theoretical clarifications of ideas that already existed in practice.

Some had already given up by 1972. The reasons why others reneged are as important to Badiou as his own determination. In the first case, there were those who lost faith very shortly after May '68, once it became clear that the French establishment would inevitably reconsolidate its grip on power. According to Badiou's recent analysis of this period, early 'renegades', like Jacques-Alain Miller, gave up at this point because they 'saw their undertaking not as the start of a long journey with a great deal of ebb and flow, but as an avenue towards power.'<sup>8</sup> Those who, like Badiou, resisted the fall in the mid-1970s drew further confidence from successive communist victories in Indochina: the Khmer Rouge took Phnom Penh on 17 April 1975, and the People's Army of Vietnam and the National Liberation Front of South Vietnam took Saigon on 30 April 1975. What made the Cultural Revolution interesting was 'the fact that this revolutionary phenomenon was occurring in the context of a *socialist* state.'<sup>9</sup> As strange as it may seem for us today, the question of violence was not a major issue for Badiou and other young Lacano-Maoists like Jean-Claude Milner. They took the French Revolution to be paradigmatic of the revolutionary tradition as a whole and therefore

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<sup>8</sup> Badiou, Alain, 'Roads to Renegacy: Interview by Eric Hazan', *New Left Review*, 53 (Sept–Oct 2008), 125–133 (p. 126). Relatively recently, Miller issued a brusque reply that recalled their original dispute, pointing out that to remain self-identical results in the 'rigidification or even mortification of the subject', and satirically classified Badiou's self-assured rectitude as a case of 'Humpty Dumpty'; cf. Miller, Jacques-Alain. 'L'affaire Badiou versus JAM'. *La Règle du jeu*, 4 March 2013. <<http://laregledujeu.org/2013/03/04/12609/laffaire-badiou-versus-jam/>> [Accessed December 2016]

<sup>9</sup> Badiou, Alain and Jean-Claude Milner, *Controversies: A dialogue on the politics and philosophy of our times* (Cambridge: Polity, 2014), p. 43.

understood popular terror as an inherent condition of all revolutions.<sup>10</sup>

As Badiou and Balmès argue in *De l'idéologie*, the obstacle to the conclusion of the revolutionary project was the socialist state. The national liberation struggles of Vietnam and Cambodia inspired Badiou because they were examples of small nations resisting the world's two superpowers. The fact that Vietnam turned out to be a puppet regime of the Soviet Union meant that in the end only the Khmer Rouge represented this virtue for Badiou.

There was a second point at which many abandoned the cause, and this is arguably even more significant for Badiou. From 1975 onwards, reports of the brutality of Khmer Rouge's terror began to accumulate. By and large, Badiou has nothing but scorn for revolutionaries who abandoned at this juncture, especially Glucksmann, who staged a television spectacle of repentance. For Badiou, the decision to abandon at this point 'revolves around the idea that, at a certain point, absolute commitment becomes indistinguishable from absolute slavery, and the figure of emancipation indistinguishable from that of barbarism.'<sup>11</sup> In short, the climb-down from revolutionary theory to critique of totalitarianism, which increasingly preoccupied French theory in the 1970s.<sup>12</sup> Badiou retains some affection for the more 'honest renegades' who stopped in the mid-1970s, Jambet and Lardreau.<sup>13</sup> His criticism of their book *L'Ange* (1976) in 'An Angel Has Passed' (1977) identified their theologico-Lacanian detachment from the situation in Cambodia as the reason for their abandonment. This boils down to interrogating 'the Cultural Revolution from the point of its (Lacanian) impossibility, and thus as that which, by raising the question of its existence, leads one to establish this existence in inexistence: another world, a beyond, the kingdom of Angels.'<sup>14</sup> However, this should be more accurately understood as political disengagement rather than abandonment. Lardreau in particular responded to the disclosure of the killing fields by admitting the impossibility of revolution in this world, and set about purifying his faith in revolt from the corruption of actuality.<sup>15</sup> As we will see, Badiou's return to

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<sup>10</sup> Ibid., p. 43.

<sup>11</sup> Badiou, 'Roads to Renegacy', p. 127.

<sup>12</sup> Christofferson, Michael Scott, *French Intellectuals Against The Left: The Antitotalitarian Moment of the 1970s* (New York: Berghahn, 2004).

<sup>13</sup> Badiou. 'Roads to Renegacy', p. 128.

<sup>14</sup> Badiou, Alain, 'An Angel Has Passed' [1977], trans. by Bruno Bosteels, in Badiou, Alain, *The Adventure of French Philosophy*, ed. by Bruno Bosteels (London: Verso, 2012), p. 210.

<sup>15</sup> Hallward, Peter, 'Reason and revolt', *Radical Philosophy*, 190, (Mar–Apr 2015), 13–24 (pp. 21–22).

mathematics in *Theory of the Subject* also involves an important engagement with the Lacanian notion of inexistence. Badiou's continued confidence in the Cultural Revolution in the late 1970s was due to a rather Lacanian relation to external experience.

For Badiou, this object of experience was very much an object of experimentation in the sense that the construction of the Cambodian mode of communal life was still in process, and that the pamphlets were the transference of this experience to French Marxist theory. For Badiou, the virtue of Cambodian communism was the remarkable defence of a space which refused the logics of the two global superpowers. This stubborn confidence in the Cambodian experiment has been overlooked in Anglophone studies of that period of French political theory. Specifically, Badiou's pamphlets do not belong to the trend criticized by Peter Starr in his *Logics of Failed Revolt*, which typically think the autonomy of absolute power from the temporality of historical effects, either by working over the failure of May '68 by formulating the eternal necessity of revolt or by substituting literary adventure for political action. This is because, firstly, Badiou's position in 1976 was that communist victory remained possible. Badiou had not abandoned Maoism in 1976 and the texts he published under his own name throughout the 1970s certainly did not exemplify 'the axiom that historical shifts are played out in the mind long after they have been played out in fact.'<sup>16</sup> Secondly, the pamphlets make no attempt to combine Marxist-Leninism with Libertarianism. On the contrary, Badiou placed his confidence in Cambodia precisely because it exemplified the purity of Marxist-Leninism. Thirdly, and most importantly, the pamphlets do not 'work over the trauma attendant to the perceived failure of May '68 by theorizing its eternal necessity.'<sup>17</sup> For Badiou, who, as a student, witnessed the failure of the French left in the referendum on de Gaulle's new constitution in 1958, the apparent short-term failure of May '68 was not decisive. Instead, it was the global failure of Maoism at the end of the 1970s that can retrospectively be designated as a trauma requiring theoretical compensation.

*Théorie de la contradiction* unequivocally affirms the primacy of experience. 'We will take as a guiding thread the viewpoint of the exploited classes—and first and foremost, their *experience*, their immediate practices: the origin of all knowledge' (DI 37) However, by January 1979 when Badiou published 'Kampuchea Vaincra!' in *Le*

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<sup>16</sup> Starr, Peter, *Logics of Failed Revolt* (Stanford: Stanford University Press, 1995), p. 4.

<sup>17</sup> *Ibid.*, p. 7.

*Monde*, Badiou is left clutching at abstract ideas. This delusional opinion piece celebrated the Khmer Rouge's 'amazing measures, such as the abolition of monetary exchange and the accelerated passage to collectivism which have no other precedent'.<sup>18</sup> Although, by this point, there was mounting evidence of mass starvation, Badiou's focus remained on the power of prescription behind the ongoing experiment. Where others saw horror Badiou dispassionately saw the imperfect existence of what Badiou and Balmès in *De l'idéologie* call 'communist invariants'.

Badiou's recent reflection on this 'errancy' is instructive: 'I regret ever having written that text. But it is not enough to regret. [...] Ultimately, it is better to think, as Spinoza said, "Repentance is not a virtue"'.<sup>19</sup> The key point in Badiou's explanation is this: 'I wanted to protect the enthusiasm I had, even against the network of information that became available bit by bit. In politics discouragement is common currency and enthusiasm a precious commodity.'<sup>20</sup>

Badiou's emphasis on Spinozistic virtue is interesting because there is more to this than the obligation to rationalize (rather than merely apologize for) errors of judgment. According to Spinoza: 'The first foundation of virtue is preserving one's being and doing this from the guidance of reason.'<sup>21</sup> For Spinoza, virtue, which is 'human power itself', is directed by the causality of inner reason; therefore anyone who neglects to preserve their own being 'is defeated by causes external'.<sup>22</sup> Both of these aspects were present in Badiou's defence of the Khmer Rouge in 1979: the belief that the continued existence of the revolutionary party/subject depended solely on the purity of its inner rationality, terror.

The irony is that this obstinate defence of the existence of the revolutionary subject prepared the way for Badiou's return to theoretical formalism. Ultimately, Badiou could not hold together his enthusiasm for prescriptive ideas and the primacy of experience. Badiou's return to mathematics in *Theory of the Subject* fills in for the lack of experience. In my view, this mathematical return is his distinctive way of coping

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<sup>18</sup> Badiou, Alain: 'Kampuchea Vaincra!', *Le Monde*, 17 January 1979, p. 2.

<sup>19</sup> Badiou, Alain. 'Je Regrette' [Transcription of an interview with Alain Badiou on the set of the France 2 TV program *Avant-Premières*], *Le Point*, 15 March 2012. <[http://www.lepoint.fr/culture/regardez-alain-badiou-je-regrette-14-03-2012-1441309\\_3.php](http://www.lepoint.fr/culture/regardez-alain-badiou-je-regrette-14-03-2012-1441309_3.php)> [Accessed March 2016]

Badiou's reference is to Spinoza, *Ethics*, trans. by Edwin Curley, in *The Collected Works*, 2 vols (Princeton: Princeton University Press, 1985–2016) I (1985), IV P53.

<sup>20</sup> Badiou, 'Je Regrette'.

<sup>21</sup> Spinoza, *Ethics*, IV P56 D.

<sup>22</sup> Spinoza, *Ethics*, IV P20.

with the defeat of Maoism at the end of the 1970s.

#### AGAINST PERMUTATION AS UNDERLYING STRUCTURE

We recall that in ‘The (Re)commencement of Dialectical Materialism’ Badiou injected a concept of deep structure into Althusser’s theory: ‘the economy of the *subjacency* of a set [*l’économie de la sous-jacence d’un ensemble*]’ (RDM 166, trans. modified & emphasis added). As we saw in chapter 2, Badiou’s hypothesis was that structural causality should be modelled as the group theoretical permutations of this underlying set. The problem, we recall, was that the formal model he provided for structural causality had no resources for thinking genuine structural change since it had no conceptual resources for thinking a way out of a closed system of permutations.

In *Théorie de la contradiction* history is no longer thought as structural causality. Specifically, Badiou targets the concept of permutation, the logico-mathematical concept central to his earlier reconceptualization of Althusser’s theory. Badiou’s enthusiasm for Maoism in the 1970s was premised on the belief that a form of rebellion exists whose ‘profound *reason*’ is irreducible to the accumulation of ‘causes and circumstances’ (TC 21–22). ‘Rebellion does not wait for its reason, rebellion is what is always already there’ (TC 21) For Badiou here, the universal connection between historical instances of rebellion can only be explained by ‘[t]he essence of the proletarian position’ which ‘subtends’ [*sous-tend*] the historical project, and whose ‘implacable duration’ guarantees victory (TC 22). What ultimately matters is the very being of rebellion: the ‘unconditional and permanent character’ of ‘popular refusal’ (TC 22, 23). The idea that historical progress is reducible to the causal determination of a successive state on the basis of a previous one is anathema to Badiou here. In Kantian terms: revolutionary reason is practical. For Badiou then, the intelligibility of the historical project is rooted in the permanent idea of concrete social equality rather than through the permutation of states of inequality of varying degrees. However, Badiou does not reject causality entirely, instead he simply conceives it as weaker than rebellion: ‘The thinking of causes does not suffice here’ (TC 22). On this point at least, Badiou shares Lardreau’s conviction that revolt is simply caused by ‘oppression *as such*’.<sup>23</sup> In what follows I will show that concerning the causality of rebellion, Badiou makes a neo-Cartesian turn which is distinct from the Spinozist causality of rebellion in

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<sup>23</sup> Lardreau, Guy, and Christian Jambet, *L’Ange* (Paris: Grasset, 1976), p. 92.

Deleuze and Guattari, and the more structuralist causality of the self-management in Rancière.

Badiou associated two philosophico-political positions with permutation in the early 1970s. The first is anarcho-desiring and the second syndico-organising. Badiou's position in *Théorie de la contradiction* and *De l'idéologie* is articulated in relation to these two poles. Both of these positions, Badiou claims, are merely permutations of Western imperialism and intellectual lures which misdirected the May '68 movement, causing its failure. In 'The Current Situation on the Philosophical Front', Badiou concluded: 'This great and violent era sees its cycle come to an end around 1972. The mass of petty-bourgeois intellectuals understood little by little that, appearances not withstanding, it was not the paladin of history.'<sup>24</sup>

In *Théorie de la contradiction* Badiou criticises anarchism and the 'marginal' philosophy of Deleuze and Guattari:

That a proletarian party comes to occupy the place of the State is only a permutation with no interest. One prefers the word 'subversion', which designates the universal disaggregation of every dominant place, whatever it might be. One privileges the restless errancy [*errance*], the derived, the *out-of-place*, everything that is excluded—at least in appearance—from the combinatory and the game of permutations. (TC 71–72)

This arguably radicalises his own previous enthusiasm for subversion. Its fundamental delusion, he points out though, is that it remains the 'simple inverse' of bourgeois order 'because it fixes as its objective the dissolution of all structure' (TC 75). This desire to escape all forms of organisation, he argues, gives rise to the defeatist view 'that every institution is paranoid and heterogenous according to the principle of the "movement"; that, according to a schizo who affirms the withdrawal from the existing order, nothing can be done *against* this order; that the self-management [*autogestion*] [...] of the pure movement must therefore be substituted for [*qu'il faille donc substituer à*] all organisation, for all hideous militantism' (TC 72). In short, Badiou held this responsible for 'the decomposition of the petit-bourgeois revolutionary movement of May '68 into widespread pestilential gobbledegook' (TC 72). The rebel is the element of chance within a Spinozist system of self-causation: nothing outside this system is possible, the best one can do is affirm the possibility of disorder.

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<sup>24</sup> Badiou, Alain, 'The Current Situation on the Philosophical Front' [1977], trans. by Bruno Bosteels, in *The Adventure of French Philosophy*, p. 5.



In *De l'idéologie* Badiou and Balmès are more interested in the deviation of syndico-organising. They argue that despite the existence of 'communist invariants' in the Lip watch factory revolt (1972–74), its underlying unionisation subverts the autonomous development of these ideas. Badiou and Balmès recognise that 'Lip is undoubtedly a powerful mass worker movement.' (DI 82) They also acknowledge: 'The vitality of communist invariants there is admirable: communitarian sense, worker democracy, anti-hierarchicalism, anti-property (we pay ourselves), etc.' (DI 82) However, the problem, as they see it, is that the unionisation of the Lip workers prevents 'the abstract power' of the communist invariants from prevailing 'under the systematisation of a properly proletarian kernel of movement' (DI 83). 'For the "ideas of the masses" to serve their real historical interest they must be taken from the class point of view from which they can be generalised and systematised.' (DI 82) What Badiou and Balmès find lacking in the Lip phenomena is 'the critique of syndicalism conceived as the form of mass of the project of revisionist power.' (DI 83)

Specifically, Badiou and Balmès criticise the notion that abstract communist ideas can be progressively fleshed out as a permutation of the established economic system. They criticize the leaders of this movement for believing in better future conditions, as if, given more time, the existing economic system will permute favourable conditions for the concrete realization of abstract ideas: 'they design [*conçoivent*] the ideological radicality of the movement from the angle of communitarian anticipation, not under that of the accumulation of real organised forces in line with the dictatorship of the proletariat.' (DI 83) Badiou and Balmès conclude that, like the Lazarc farmer revolt, the wishful anticipation of the Lip worker revolt is motivated by popular nostalgia. They 'remain driven by [*reste porté par*] the powerful promise of unlimited productive forces.' (DI 89)

It is worth comparing this account of the Lip revolt with Rancière's in *Althusser's Lesson* (1974). In Rancière's account, the factory workers think in the realm of the sensible rather than the purely intelligible.<sup>25</sup> Their practical thought produces statements whose words 'cannot be taken literally, but have to be explained by particular circumstances and referred back to what they designate.'<sup>26</sup> For example, the Lip worker demands a negative of the economy he experiences: 'The economy should

<sup>25</sup> Rancière, Jacques, *Althusser's Lesson* (London: Continuum, 2011), p. 85.

<sup>26</sup> Ibid., p. 85.

serve man, not man the economy.<sup>27</sup> For Rancière, this has nothing to do with philosophical debates about humanism, instead it refers to the workers' desire to be autonomous and is given meaning by the actual sequestration and democratization of the factory. Despite his dispute with Althusser, Rancière's conception of the progressive worker remains structuralist insofar as he can only think the possibility of another economy by rejigging the existing one. For Badiou and Balmès, this merely makes it possible to dream about the systematisation of just ideas in the form of a return to a 'pastoral economy' (DI 87) By contrast, they argue that it is the 'empirical non-appearance' [*inapparence*] of the kernel of proletarian force in existing historical conditions 'that Marxism-Leninism transforms into light.' (DI 84) Ultimately, the permanent source of Badiou and Balmès' proletarian ideology is located in the realm of the purely intelligible.

To sum up, what the causal logics of anarcho-desiring and syndic-organising have in common is that the new state is supposed to follow the old in the way that a conclusion follows from a premise. The difference is that anarcho-desiring rebellion exists at the outer limits of the capitalist state while syndic-organising rebellion occupies institutions if not the existing seat of state power itself. In *Théorie de la contradiction* Badiou addresses the inadequacy of this in his meditation on the 'principal' of dialectical process (TC 70). The 'becoming principal of the secondary', Badiou argues is essentially dissymmetrical in the sense that the shifting of the relationship between principal and secondary does not involve 'a simple exchange of places' (TC 71) The new economy (communism) is radically different from capitalism and its socialist permutations because the old principal does not survive the cut. At the level of class war, this means that 'something of the old must die' (TC 86). In the passage to communism, this something is of course the bourgeoisie, who Badiou claims must be reduced to 'absolutely nothing' (TC 87). I will return to the role of death in the next section. The question here is: how does Badiou's dialectic escape the causality of permutation? Badiou recognises that:

This question is of great philosophical importance. In fact, the law of exchange, of permutation, is the essential resource of all structuralist ideologies, whose political implications are well known: if the movement of reality is nothing but a combinatory shift of places [*analyse combinatoire*], then it is certain that the essence of this movement resides in its invariants, i.e. *in the rules which command the permutations*. In this sense, all novelty

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<sup>27</sup> Ibid., p. 83.

is merely apparent: the displacement of terms from place to place leaves the underlying [*sous-jacente*] structure of exchange intact. (TC 71)

Badiou's alternative also depends on 'invariants', but ones which do not direct structures of inequality. Badiou's invariants—communist ideas—presuppose unconditional equality. Badiou does not spell it out, but presumably, these rules cannot command permutations for the simple reason that there is no modality or variation in the realm of the same. The type of causality that Badiou affirms supposes the possibility of external force. Badiou and Balmès conclude that the Lip workers were wrong about the status of the 'promise' of productive forces: 'there is much more to this promise which is internal to the worker reformulation of communist invariants. The working class is also the bearer [*porteuse*] of *knowledge* which prohibits that the promise is kept: the knowledge of the system of exploitation of which the popular masses are victims, and thus the capacity to organise for uninterrupted destruction in stages.' (DI 89)

What the proletariat know, according to Badiou and Balmès, is not how to realise communist ideas on the basis of structures of exploitation, but that these ideas are prescriptive and must therefore be applied in a space purged of the law which governs the permutations of exploitation. This does not amount to a rejection of Marxist science. It is simply the conclusion that although Marxism illuminates the mechanisms of capitalist exploitation, it cannot think anything else. For Badiou and Balmès, the task of the revolutionary class is to make space for 'an autonomous systematization' which 'is subordinated to the formulation of communist invariants and poses their realisation as the general objective [*cible*] of the movement of history taken as a whole [*ensemble*]' (DI 90).

This is not without causality: 'the capacity to organize' results from 'knowledge of the system of exploitation' (DI 89). However, the capacity to organize is not based on a permutation of the existing system of exploitation, but merely on the empty possibility of something else. Philosophically, this involves a neo-Cartesian move: returning to the wild causality of occasionalism. Malebranche radicalized the Cartesian omnipotence of God's will: he is not the source of eternal truths, but the creator of a contingent world that continues to exist for no other reason than he continues to will it. Malebranche: 'the nature or power of each thing is nothing but the will of God; that all natural causes are not *true* causes but only

*occasional* causes.’<sup>28</sup> Taken simply as a system structured in dominance, this means that there is no reason why the law of determination holds other than because the occupant of the seat of power wills it to be so. An Althusserian take on this might stress that in places where the sovereign’s grip on power is weak, the position of dominance is up for grabs. Understood as such an occasion, the Lip watch factory episode can be viewed as a missed opportunity. When, after the failure of Maoism, Badiou reconsiders the role of causality in *Theory of the Subject*, the lesson learned from the Lip episode is that: ‘The most generous watchmaker in the family is without contest Malebranche.’ (TS 39) Badiou’s more recent seminars on Malebranche approached occasionalist causality from a more Sartrean angle. There, the key point is that the created, sinful, world is not only external to God’s being, but because it is ‘radically finite’, from the point of view of God’s infinite power, ‘the world must be on the edge of nothingness’.<sup>29</sup> Redemption—when God ‘incarnate[s] himself in this quasi-nothingness’—is ‘heterogeneous to the world’s causality’; it is a demonstration of God’s power: through his ‘capacity for nothingness’ he can halt humanity’s fall at will even though ‘he has no reason to intervene, inhibit, interrupt, or limit the disaster.’<sup>30</sup>

In *De l’idéologie*, the practical limitation of causality is clear: the knowledge that wish-fulfilment is a mechanism of fantasy which serves the interest of the established order does not translate into any concrete directive regarding how to think and act. What it does cause, for Badiou and Balmès, is a fraction of the working class to become proletariat, people who are free to think and act in accordance with the idea of concrete equality:

With the proletariat arises the possibility of an autonomous systematization of just ideas of the whole [*ensemble*] of the popular masses, in the specific form of the proletarian theory of history and revolution: Marxism-Leninism. This systematization is subordinated to the formulation of communist invariants and poses their realization as the general objective [*cible*] of the movement of history taken as a whole [*ensemble*].’ (DI 89–90)

The risk is that communist invariants might turn out to be only partially intelligible, or worse, ideas in the Kantian sense. To move beyond the realm of historical

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<sup>28</sup> Nicolas Malebranche, *The Search after Truth*, ed. and trans. by Thomas M. Lennon and Paul J. Olscamp (Cambridge: Cambridge University Press, 1997), p. 448.

<sup>29</sup> Badiou, Alain, “‘March 18, 1986,’” from Alain Badiou, Malebranche: The Seminar of Alain Badiou (Being 2—The Theological Figure, 1986)’, *parrhesia*, 23 (2015), 2–25 (p. 22).

<sup>30</sup> *Ibid.*, pp. 22, 23.

conditions in which communist ideas can only be thought in varying degrees of modality, Badiou and Balmès need a convincing account of the synecdochical status of the proletariat: how the proletariat is both historically determined as a class and able to totalize (and therefore end) history by dissolving class in general. In other words, how the proletariat is an exception to the permutations of history. In my view, the logic of the pamphlets fails in this regard and is better understood as a logic of anxiety, in the Lacanian sense. I will demonstrate this in the remainder of this section.

First, a brief summary of how the end of history is imagined in *De l'idéologie*. History is the time (going back millennia) throughout which practices of exploitation have provided a class of people with the means to dominate the masses. Revolt exists as long as there is exploitation and class antagonism has existed at all stages in history when the exploited organize themselves into a class which targets the destruction of the oppressor: the constant of history is the permanent recurrence of organized rebellion of the exploited. History is punctuated by the change of dominant class, however, periodization merely serves to transfer control of the sovereign state from one class to another. By itself, of course, this displacement of power does not stop practices of exploitation; on the contrary, with each periodization it has instead required the ascendant class to invent more devious methods to keep rebellion temporarily at bay. The end of history is only possible with a qualitatively different form of class domination: the progressive dissolution of class itself. This is only possible because the revolutionary class—the proletariat—is conscious of the law of scission governing the resolution of historical contradictions, thanks to the accumulated experience of episodes of rebellion. The first historical lesson: class antagonism is a fight to the death and anything less than total domination will mean that an ascendant class will inevitably succumb to a counter-revolution. The second: the masses have sporadically practiced nascent forms of communal life throughout history and that communal life is, in nature, anti-class. What is qualitatively different about the dictatorship of the proletariat is that it does not merely operate the logic of scission in order to occupy the seat of sovereign power, it also applies the logic of scission to the contradiction which underlies the historical process as a whole: between class and mass. It is this double application of the logic of scission that makes it possible to think, at least in principle, the dissolution of class domination and the transfer of power to the masses.

However, it is actually impossible for this logic to reach this conclusion because it presupposes the permanence of the proletarian class position. In his meditation on the

‘wisdom of rebellion’ in *Théorie de la contradiction*, Badiou posits that ‘rebellion is subject’, and that its ‘profound *reason*’, ‘which cannot be uprooted’, is the ‘class being’ which ‘subtends’ [*sous-tend*] all revolutionary phenomena, and whose ‘persistence’ and ‘implacable duration’ defines ‘proletarian obstinacy [*obstination*]’ (TC 22). Thus conceived, it is actually impossible for the proletariat to dissolve itself, instead it must affirm its nature: ‘it is rebellion that legislates about the future’, not in the sense of ‘an ought, a duty to be’, but as ‘the affirmation of being itself’ (TC 23). While the revolutionary logic of the pamphlets can think the destruction of one class by another, the fact that all revolutionary phenomena are reducible to the essence of proletarian being means that it cannot think the destruction of class in general. By prescriptive force, class being must persist in the resolution of the scission of ‘the real worker movement’ into ‘its objective existence as mass and its subjective existence of class’ (DI 126), and therefore the proletariat can never completely dissolve itself and there can be no total transfer of power to the masses. Although Badiou defines the proletarian position as the ‘place of purification and concentration of revolutionary ideas issued by the practice of the masses’ (DI 126), his prescription regarding proletarian ontology actually makes it impossible for the dictatorship of the proletariat to uncompromisingly realise anti-class ideas and communal life.

Instead, this logic can only lead to the anxious conclusion that it is impossible to actualize the total transfer of power to the masses. Although the proletariat may wish to sacrifice itself, it must ultimately conform to the virtuous (in the Spinozist sense) preservation of its own being. At best, the subject of this logic tends towards the destruction of class in order to clear a space for true communal life; however, its being is what prevents it from ever concluding this process.

So far, we have established that the logic of history in the pamphlets is inconclusive due to the permanence of its subject. By itself, of course, this is not sufficient to understand it as a Lacanian logic of anxiety. For that we also need to establish that the persistence of this subject *has* an obscure political object, since, if it were simply *without* an object, it would not be anxious in the Lacanian sense of the term.

Anxiety has a rich history in modern philosophy. Like Kierkegaard, Freud, Heidegger, and Sartre, Lacan distinguishes anxiety from fear, which is typically related to the presence of a threatening object. What distinguishes Lacanian anxiety [*angoisse*] from the existentialist tradition is that it is defined in terms of epistemological impossibility—specifically, the subject cannot know or ‘possess’ the cause of its desire

other than in the form of the noumenal object of its discourse: ‘When anxiety is at issue, each piece of the mesh, so to speak, only carries any meaning insofar as it leaves empty the space where anxiety lies.’<sup>31</sup> For Lacan, the subject cannot escape the effects of language in its quest to know the cause of its desire, and therefore the structure of anxiety ‘is well and truly the same’ as that of fantasy.<sup>32</sup> This is Lacan’s solution to the Freudian problematic of the ‘realistic basis’ of neurotic anxiety. For the Freud of ‘Inhibitions, Symptoms and Anxiety’, neurotic anxiety—‘about an unknown danger’—and realistic anxiety—‘a danger that is known’—can be understood as aspects of the same thing insofar as the cause of neurotic anxiety (instinctual demand) ‘can be admitted to have a realistic basis.’<sup>33</sup> Lacan’s claim that anxiety has a proper object stems from his interpretation of one of Freud’s key statements: ‘Anxiety [*Angst*] has an unmistakable relation to *expectation*: it is anxiety *about something* [*vor etwas*]. It has a quality of *indefiniteness and lack of object*.’<sup>34</sup> For Lacan, the subject can preserve itself insofar as it continues to speak about the same thing, and on condition that possessing total knowledge of this object is indefinitely deferred. In this sense, Lacanian anxiety is the expectation of a real danger: the certainty of death at the point where the subject becomes identical with its object and its discourse comes to an end. In the existentialist tradition, by contrast, the possibility of being nothing is celebrated as subjective freedom. As Kierkegaard put it, ‘anxiety is freedom’s actuality as the possibility of possibility.’<sup>35</sup> The key point is that no matter how strongly the subject might believe it is determined by something external, ‘there is indeed nothing against which to strive’, and it is the subject’s essential relation to this nothing that ‘begets anxiety’.<sup>36</sup> There are two sides to this, ‘objective anxiety’, which concerns the fact that, following original sin, ‘sensuousness is constantly downgraded to mean sinfulness’, and ‘subjective anxiety’, which is the ‘dizziness of freedom’ experienced when spirit looks down into ‘its own possibility’ (into the ‘abyss’).<sup>37</sup>

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<sup>31</sup> Lacan, Jacques, *Anxiety*, trans. by A.R. Price and ed. by Jacques-Alain Miller, The Seminar of Jacques Lacan: Book X, 1962–1963 (Cambridge: Polity, 2014) [2004], p. 9.

<sup>32</sup> *Ibid.*, p. 4.

<sup>33</sup> Freud, Sigmund, ‘Inhibitions, Symptoms and Anxiety’, in *The Standard Edition of the Complete Psychological Works*, trans and ed. by James Strachey, 24 vols (London: Vintage, 2001), XX, 165, 167.

<sup>34</sup> *Ibid.*, p. 165.

<sup>35</sup> Kierkegaard, Søren, *The Concept of Anxiety*, ed. and trans. by Reidar Thomte with Albert B. Anderson (Princeton: Princeton University Press, 1980), pp. 58, 61.

<sup>36</sup> *Ibid.*, p. 41.

<sup>37</sup> *Ibid.*, p. 61.

In *Being and Time*, Heidegger emphasised that the possibility of what Kierkegaard called subjective anxiety is grounded on the certainty of future death, and ‘authentic’ understanding of anxious turning away from the world as such (‘falling’) liberates the individual from the perceived obligation to conform to social norms and values. For Heidegger, death is the transcendental limit to worldly existence and grounds human temporalizing, it gives meaning to everything that has taken place and will take place. In *Being and Nothingness*, Sartre developed the practical dimension of this conception of freedom in terms of the pure possibility of a conscious being to be the agent through which ‘nothingness comes into the world’.<sup>38</sup> ‘Anguish [*angoisse*] is precisely my consciousness of being my own future, in the mode of not-being. [...] The decisive conduct will emanate from a self which I am not yet.’<sup>39</sup> The individual’s freedom is based on the supposition that a ‘nothingness’ separates every present from its past and future, and therefore remaining identical with oneself in time is a matter of choice pure and simple. For Sartre, the difficulty is not knowing what we are—‘we *are* anguish’<sup>40</sup>—but taking full responsibility for our actions in worldly projects. Unlike the Lacanian subject, it is always possible for the Sartrean individual to consciously avoid delusion by dramatizing the necessity to choose—even in situations where there are only ‘bad’ possibilities. Sartre simply denies the agency of an essentially unknowable object. This is because, although it has no choice but to carry out its projects in the world, the anguished subject has no proper object.

I will come to Badiou on anxiety shortly. First, the sense in which the object of the revolutionary subject of the pamphlets remained obscure needs clarifying. In the first place, French Maoists could only experience the Cultural Revolution indirectly, through reports and testimony. More profoundly, the communist hypothesis is formulated (after Engels) as Thomas Münzer’s set of negative conditions (DI 61): ‘By the kingdom of God Münzer meant a society with no class differences, no private property, and no state authority independent of, and foreign to, the members of society.’<sup>41</sup> Likewise, Badiou claims the Khmer state is not a permutation of either of the two superpowers: ‘There is nothing in common between the puppet statist domination and the state of popular and democratic dictatorship progressively constructed by the

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<sup>38</sup> Sartre, Jean-Paul, *Being and Nothingness*, trans. by Hazel E. Barnes (London: Routledge, 2003), p. 69.

<sup>39</sup> *Ibid.*, p. 56.

<sup>40</sup> *Ibid.*, p. 67.

<sup>41</sup> Engels, Friedrich, *The Peasant War in Germany*, in *MECW*, 49 vols (London: Lawrence & Wishart), 2010, X, 422.



Khmer Rouge.’ (TC 101–2) The reason why the anxiety of the logic of the pamphlets is Lacanian is that Badiou’s reformulation of revolutionary theory actually depended on denying for as long as possible any knowledge of what was actually taking place in Cambodia. Badiou’s confidence in the Khmer experiment was entirely without Sartrean anguish. Rather than taking responsibility for Khmer terror by admitting the objective disaster that had resulted from the actualization of their subjective freedom, Badiou preferred to view the passage to rural collectivism in Cambodia as an experiment in which Münzer’s negative prescriptions were the protocols. Badiou’s reluctance to admit the closure of the experiment is evidenced by the fact that on the 17 January 1979 Badiou published ‘Kampuchea Vaincra!’—ten days after the Vietnamese army deposed the Khmer Rouge—he insisted that not only was the experiment still in process but that the Cambodians would overcome their latest invaders. Subsequently, of course, the establishment of a socialist puppet state in the following months effectively returned Cambodia to a permutation of the soviet state. The key point is that between April 1975 and January 1979 Badiou’s understanding of Khmer communism did not go beyond the prescription of ‘egalitarian, anti-property and anti-state formulations that outline the basic features for a communist program.’ (DI 66) The positive content of these prescriptions remained anticipatory, and in this sense the pamphlets’ relation to the object of communism is that of being *vor etwas*; not only in the sense of being about something, but more precisely as before communism.

Furthermore, the relation between the pamphlets’ subject of history and the object of its desire has the conditional form of Lacanian anxiety. ‘It’s a certain type of conditional liaison, which links *being* to *having* in a kind of alternation. There, he’s not without having it, but elsewhere, right where he is, it’s not to be seen.’<sup>42</sup> This alternation of being and having is distinct from the alternation of being and nothingness in Sartrean anguish. In the place where the subject of anxiety *is* (the place of silence in the subject’s discourse), it cannot *have* the object of its desire; and conversely, where the subject *has* the object (in the misrepresentations of language), it *is* not. In the logic of the pamphlets, the ontology of the proletariat prescribes the impossibility of possessing its object. In other words, class and mass are linked in the conditional form ‘being not without having’. Although communal life is the proper object of the proletariat, prior to victory, this mode of social organization is unavoidably a fantasy in the discourse of the proletariat.

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<sup>42</sup> Lacan, *Anxiety*, p. 89.

Finally, this means that we should also understand Badiou's Maoism in terms of the Lacanian act. In a nutshell, the Lacanian act is the symbolic intervention by which the subject rejigs its discourse to effect a partial transfer of the object of desire. 'To act is to snatch [*arracher*] from anxiety a certitude. To act is to bring about a transfer of anxiety.'<sup>43</sup> The fact that it has a proper object, Lacan tells us, is what distinguishes anxiety from the other affects: 'anxiety, of all signals, is the one that does not deceive.'<sup>44</sup> Furthermore: 'Therefore the real, an irreducible pattern [*mode*] by which this real presents itself in experience, is what anxiety signals.'<sup>45</sup> In a relatively recent text, 'Lacan. Seminar, Book X: *Anxiety*' (2005),<sup>46</sup> Badiou explicitly links the political experience of the 1970s to anxiety. His concise summary of the seminar is worth repeating: 'The central thesis of the seminar destroys the established conviction according to which anxiety is "without object," correlated to the void of experience, or coming from the same loss from which melancholy and grief appear. No, Lacan tells us. Anxiety has a proper object, it is *vor etwas*, confronting something.'<sup>47</sup> He recalls 'the obvious link between anxiety and action, a link which we experienced so strongly in the blissful red years, between 1968 and 1978, when days dedicated entirely to political intervention were accompanied by a subtle and constant anxiety.'<sup>48</sup> This anxiety, Badiou remarks, was what gave him confidence that the object of his activity was nothing other than the real of politics: 'Our anxiety was only the remainder of a massive affect transferred to action.'<sup>49</sup> Specifically, the symbolic act of this transference was a tighter reformulation of Marxist theory around the revolutionary experience of the 1970s. The pamphlets are Badiou's contribution to this.

It is worth pausing to consider the predictable objection to my interpretation. The Popperian sceptic will claim that this logic is simply falsified by empirical history; that there was no transference and therefore no element of truth in it. However, the failure of Maoism is consistent with my interpretation since, if the logic of the pamphlets had actually turned out to be conclusive, it would have overcome anxiety about communal life. In its Lacanian formulation, the subject of

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<sup>43</sup> Ibid., p. 77.

<sup>44</sup> Ibid., p. 160.

<sup>45</sup> Ibid., p. 160

<sup>46</sup> Badiou, Alain, 'Lacan. Seminar, Book X: *Anxiety*.' *Lacanian Ink*, 26 (2005), 70–71.

<sup>47</sup> Ibid., p. 71.

<sup>48</sup> Ibid., p. 71.

<sup>49</sup> Ibid., p. 71.

anxiety can only sustain the encounter with its object in death. According to my interpretation, what persists in Badiou's thought when the revolutionary experience of the 1970s ends is a partial clarification of revolutionary theory plus residual anxiety about communal life. This explains why, in the absence of new revolutionary experience at the beginning of the 1980s, Badiou returned to pure theory and set himself the task of sketching out a purely theoretical surmounting of anxiety. My view is that this has conditioned Badiou's theory ever since, which, broadly speaking, should be understood as the treatment of anxiety related to communal life with mathematical form.

In I will return to this in chapter 4. The next step in this chapter is to consider the formality of proletarian logic in *Théorie de la contradiction* and *De l'idéologie*.

#### THE FORMAL POWER OF CLASS LEADERSHIP

In *Théorie de la contradiction*, Badiou announces a reversal of the epistemological position of *Concept of Model*: 'Marxism-Leninism is not a formalism.' (TC 18, n. 5) In the 1970s, practical goals are what matter, not the rigorous autonomy of the sign: 'If the target is reached, signs matter little [*Si la cible est atteinte, peu important les signes*].' (TC 18, n. 5) The regulation of the use of terms is now subordinated to political practice rather than scrupulous mastery of scriptural identity: 'From here words can be displaced: only their power counts. Again, force outweighs the respect of places.' (TC 18, n. 5) Theory must begin with content because ideas 'denote practical and historical realities and class relations, not imaginary relations', and ideas 'are governed by forces external to thought' (DI 33). Theses are no longer tested in the purely abstract universe of sets but in 'the historical time [*durée*] of class confrontations.' (DI 106) This more practical type of theory is the mechanism through which the subject clarifies its course of action.

The question is: what is proletarian theory and how does it prescribe victory? Also, if theoretical supervision is essential, does revolt really already contain 'victorious reasons'? In what follows I will show that in *Théorie de la contradiction* and *De l'idéologie* proletarian theory is conceived as a formal logic which operates classical negation. Although Badiou's Marxism-Leninism of the 1970s is not a formalism, it understands power relations in terms of formal logic. I will argue that the problem with this approach is the use it makes of classical negation. Used to clarify the relation between class direction and just ideas, classical negation ultimately leads to the dead end of a plain choice between revision or oblivion.

*De l'idéologie* provides the clearest statement on the formal status of this proletarian logic:

*The proletariat is the greatest formal power of history.* (DI 96)

However, it is not at all obvious why this is so if, as Badiou and Balmès affirm, reason is revolt and revolt is always given. This is all the more puzzling given that Badiou and Balmès claim that the reason rebellion exists wherever there is domination is because the representations of the dominant class ideology are formal abstractions in which the real content of concrete equality is literally irrepresentable. 'It is because there exists, in the dominant ideology, an *irrepresentable* practice (the revolutionary class revolt) that that ideology is intelligible as a *representation*.' (DI 42) Is formal thinking not counter-revolutionary to the core, as the Rancière of the 1970s would say?

Badiou does not think so. What distinguishes his thought in the 1970s is the persistence of formal logic in a supporting role. In my view this involves a highly problematic simplification of power relations. It is also, however, the reason why Badiou is able to defend Maoist terror up to the very end of the 1970s, and therefore deserves to be understood. The formal power of Badiou's conception of proletarian thought boils down to two points.

The first is that the hypothesis of concrete equality demands 'an absolutely new class logic' (DI 106): Proletarian logic is nothing less than 'the first form of universal thought, the first organizing class logic of the unlimited thought of the masses.' (DI 96)

The second point is that the logical form of proletarian logic is entirely separable from sensuous activity. In fact, this formality is a prerequisite of the ability to end history. For Badiou and Balmès, 'the treasure of popular thought proves itself as antagonistic autonomy, and the principle of its victorious culmination liberates itself from the sensible immediacy of revolts, which nevertheless remain the sole true *energy*.' (DI 106) Like any formal logic, this logic will revert to its lifeless 'skeletal' structure without embodiment in lived relations.

The essence of this logic is classical negation. Used for thinking the autonomy of a political class, this mechanism supports the appalling alternative of kill or be killed. This particular application of classical negation is presented in *Théorie de la contradiction*.

The formal principle of Badiou's conception of contradiction is 'the axiom: one divides into two.' (TC 48) His theory of this process is presented as five principles. It is in the second principle that the operation classical negation is articulated: 'Every

process is a set [*ensemble*] of contradictions’ (TC 61) The key passage is worth quoting at length:

No bourgeoisie without the proletariat, and certainly no revisionists without Marxist-Leninists. But *nothing in common* between bourgeoisie and proletariat, between revisionists and Marxist-Leninists, except to define by their irreconcilable conflictual alterity the divided unity of the historical process: that of the class struggle, that of the struggle between two ways in the worker movement. The unity (of contraries) is a relation, not an identity. *The intersection of contraries is void.* It is not ‘filled’ as long as we consider the two terms as one *in their opposition to a third*, but one can change the process: the proletariat and the national bourgeoisie have, *as contraries*, nothing in common. This being so, the people, in their opposition to an imperialist aggressor, can contain both the proletariat and the national bourgeoisie. But the process in question is no longer the initial process (that of the proletarian revolution), it is the new process (the war of national liberation) whose content is a new contradiction (the people/the imperialist aggressor). Yet, from the point of view of this process, ‘the two’ does not fuse with ‘the one’ which preceded it: between the people and the imperialist aggressor there is nothing in common. (TC 64–65)

The crux of this is the view that every political situation can, when push comes to shove, be reduced to an antagonism between two classes that can only be resolved as absolute non-relation. However, this did not really reflect the concrete situation in France. As we have seen, Badiou was critical of the more intermediary standpoint of the Lip factory workers and the inability of anarchists to replace the structures of capitalist exploitation. What this logic reflected more accurately was national liberation struggles in the latter stages of the Cultural Revolution (Vietnam and Cambodia). For Badiou then, the present of 1975 was composed of different struggles whose antagonistic terms were not the same. While France was experiencing a reactionary counter-revolution following what Badiou considered the failure of the proletariat to think its absolute non-relation to the bourgeoisie, the Vietnamese and Cambodian people were more successfully defending their autonomy from the imperialist aggressor. Like Lenin, Badiou understood the ‘people’ as a composite of two classes. While this was a mixture of the proletariat and peasantry for Lenin, for Badiou, it combined the proletariat and national bourgeoisie. Of course, for Badiou, every ‘one’ will turn out to be split, due to ‘the universality of the principle of scission’ (TC 65).

This raises the question of the formal principle of process in general. We might assume that the universality of scission rules out dialectical synthesis, but no: ‘Synthesis is the process of destruction/division’; ‘The dialectical concept of synthesis is the engenderment of a new scission and nothing else.’ (TC 65) Presumably, this must hold

at the level of the system as a whole otherwise it would not be possible to think ‘the interdependence of all contradictions’ (TC 66). Badiou does not define interdependence, but he does say this: ‘It is not sufficient to admit that all process is qualitatively determined by a principal contradiction. One must also recognize that it is the system of contradictions, taken as whole [*ensemble*], that is in movement’ (TC 68).

This leads us to the question of the mathematical status of certain terms used in the passages quoted above (‘set’, ‘intersection’, ‘void’). On the basis of two of Badiou’s key statements—‘Every process is a set [*ensemble*] of contradictions’, ‘*The intersection of contraries is void*’ (TC 61, 64)—it is possible to model his logic of scission set theoretically with a couple of forced substitutions (‘contradiction’ must be taken to be synonymous with difference and ‘contraries’ with complements). However, such a forced reading overlooks the role of death in Badiou’s conception of the dialectic: ‘The resolution of a contradiction includes, we say, the part of death.’ (TC 87) Formally, this means that a contradiction is resolved when one of its terms is deleted. Badiou’s uncompromising rule of destruction is ‘death is either dialectically affirmative or void.’ (TC 89) In practice this means that when power changes hands, the previously dominant class is annihilated by the prevailing class. Although this has all too often involved killing people, in theory at least, the death of a class does not necessarily mean the death of its members. On this point Badiou affirms a variant of Jacobin terror in which violence is the means by which the law can be extended for the purpose of consolidating a new political order, and is therefore distinct from destruction pure and simple. ‘Marxist truth is not a conciliatory truth. It is, in and of itself, dictatorship and, if need be, terror.’ (TC 17). At any rate, the logic of the pamphlets is not a mathematical formalism since, even when we are dealing merely with the death of a ‘class’ rather than its ‘members’, mathematical forms do not by themselves either come into or go out of existence.

However, this does not exclude the possibility that Badiou uses classical negation as a heuristic device to formulate his logic of revolutionary scission and the terror of the Khmer Rouge. I think the formal logic of scission in the pamphlets is the precursor of what Badiou will later call ‘classical negation’. Badiou’s definition of ‘classical negation’ in ‘The Three Negations’<sup>50</sup> (2008) helps us to clarify this:

First, define P as a multiplicity, or as a set. Define non-P as the set of all elements which do not belong to P. The result, by extensionality, is that non-P is absolutely different from P. P

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<sup>50</sup> Badiou, Alain, ‘The Three Negations’, *Cardozo Law Review*, 29.5 (April 2008), 1877–83.

and non-P have nothing in common. So, it is impossible to find something which is simultaneously in P and in non-P. So, the principle of non-contradiction is true. Second, every element which is not in P is in non-P, by definition of non-P. So, there is no third possibility: something is always either in P or in non-P. And the principle of excluded middle is true.<sup>51</sup>

In Badiou's logic of scission in *Théorie de la contradiction* these two conditions are met. Contraries are absolutely different: the principle of non-contradiction is true. There is no content which can synthesise the complements once division has taken place: The principle of the excluded middle is true.

In *Théorie de la contradiction* the concept is presented as the strong difference of scission which is opposed to the weak difference of permutations of the 'one' whose 'two' is taken as the point of departure of the logical process. What Badiou later calls classical negation is presented as a cracked version of Hegelian *Aufhebung* in which 'classical' strong negation is split from 'intuitionist' weak negation:

The materialist dialectic is not, like the Hegelian dialectic, the thought of 'that which is maintained in death itself'. On the contrary, the dialectic *divides death*: there is in effect that which remains, in the conflicting conditions of a new type: thus, the bourgeoisie is maintained in the dictatorship of the proletariat, through the objective form of the persistence of the Law, in the subjective form of its penetration into the party. But there is also what dies completely, leaving no trace. There is no true revolutionary thought except the one that leads the recognition of the new all the way to its unavoidable reverse side: something of the old must die.

The materialist dialectic affirms, with Hegel, that true life is not that 'which shirks from death and keeps itself untouched by destruction'<sup>52</sup> (TC 86)

For Badiou then, death does not always mean annihilation. There is the death of systems of exploitation: 'An annihilated system, irretrievable and sterile' (TC 88). But there is also 'that which is incorporated in the future, that which enters into metamorphosis under the law of a new unity of opposites'. (TC 88) In the resolution of a contradiction one thing is jettisoned to 'the dustbin of history' while the other persists (TC 87).

Badiou's example is the Khmer Rouge's 'crushing [*écrasement*] of the Cambodian

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<sup>51</sup> Ibid., p. 1880.

<sup>52</sup> Badiou's citations are from the old Aubier French translation of Hegel's *Phenomenology of Spirit*. I have rendered them consistent with the French. In the standard English translation, the phrases are: 'the life that endures it [death] and maintains itself in it [death]'; 'which shirks from death and keeps itself untouched by devastation', cf. Hegel, G.W.F., *Phenomenology of Spirit*, trans. by A.V. Miller (Oxford: Oxford University Press, 1977), p. 19.

puppet regime [...] The Lon Nol clique disappeared from the scene of history and the civil war was concluded by the total victory of the popular forces.’ (TC 89) Badiou qualifies this, noting that ‘in every case, this is the fastest and easiest part’ (TC 110 n. 24). The hard part is how to stay true to revolution (‘primary process’) and prevent the kind of death in which the old law recomposes in the cleared space: the ‘[d]eadly symmetry’ of ‘secondary process’ restores the old system in the name of the people (TC 96). In the Khmer state this was a real problem because ‘the people’ was a composite of the proletariat and the national bourgeoisie.

Where Badiou really goes astray here is his claim that all the elements of the old state must be completely decomposed, otherwise ‘the objective dialectic paralyses the subjective dialectic.’ (TC 91) Badiou makes no concessions on this point. Proletarian revolution ‘affirms the impossibility of the proletariat making use of the bourgeois state machinery. The proletarian revolution is only conceivable in the effective destruction of this state and the construction [*édification*] of forms of radically new power.’ (TC 102) The problem with this is Badiou’s privileging of proletarian leadership. If proletarian revolution really is ‘the primary process par excellence’, and its proper logical ‘machinery’ is (as we have seen) classical negation, then the contradiction between class organisation and ideas of the masses cannot be resolved such that communist ideas are finally actualised because this would entail the negation of proletarian being. To see why this is the case we need to return to *De l’idéologie* and consider how Badiou and Balmès relate the ideas of the masses to the leadership of the revolutionary class. For Badiou and Balmès, what underlies this logic is the *practice* of class organisation:

The class practice subjacent to [*sous-jacente à*] the mass revolt and communist invariants takes a given principle of exploitation as its target. In history, the communist invariants have always been borne by the revolt of the exploited classes, i.e. by the revolt of the direct producers: slaves, serfs, proletarians. The communist invariants are at the heart of ideological resistance against exploitation in general and the ideas that serve it. They reflect the real movement in which the exploited rise up, not only against the specific form of exploitation of which they are victims, but against the very idea of exploitation. These ideas are invariant in the sense that a class capable of directing their materialisation does not have to wait for them to emerge [*surgir*]. They are ideas *of the masses*. But before communism, the masses do not direct the historical process, they *make* it. Leadership [*direction*] is a function *of class*. Leadership means the self-constitution of a revolutionary class for a *fraction* of the masses, i.e. a class capable of setting itself up as a state class and modelling society as a whole in its image. (DI 90–91)



However, it is not clear how this conception of leadership will ever result in the transfer of power to the masses. Badiou and Balmès are committed, on the one hand, to the causal process through which the subject of history becomes self-conscious: the proletarian accumulation of historical experiences of revolt amounts to knowledge of a persisting object (the pure idea of concrete equality), and since this is the object *of* the masses, it is only present in the form of an impossible idea *before* communism. On the other hand, they insist that, although it has not always been conscious of its potential, at every moment in history this subject has always had the power of practical reason at its disposal and therefore, once in power, is free to legislate the actualisation of communist ideas. Accordingly, it might seem that once the revolutionary class has seized power the actualisation of communal life is simply a matter of choice. The difficulty is that the actualisation of communal life requires the revolutionary class to move beyond ‘ideological resistance’ to become ‘the organizing principle’ of the ‘effective destruction’ of ‘class society in general’ (DI 79). To make this step, the proletariat must resolve the ‘double character’ of ideological resistance: the contradiction between the character of mass—‘the will [*volonté*] to abolish class difference’—and that of class—‘the will to assert itself as the class carrier of a particular program, to the idea of changing the State’ (DI 80). However, as we saw in the previous section, the force of ontological prescription obliges the proletariat to preserve its class being, and therefore its Spinozistic virtue (self-preservation) is more powerful than its will to transfer power to the masses. In short, although the proletariat may wish to sacrifice itself in the name of communism, it actually has no choice but to extend the long history of class-based society once it has taken power.

Ultimately, it is the formal essence of Badiou’s subject of history that makes failure unavoidable. Classical negation is the obstacle. At the level of the resolution of the contradiction between class and mass, the operation of classical negation must preserve the proletarian class, and therefore there is only one ‘solution’: the affirmation of proletarian class being by assigning the place of death to the communist idea—at which point, the end of history is deferred once more.

In other words, what we have here is at best the vanishing subject of anxiety, whose elusive object is concrete equality.

The Hegelian way out of this dead end would be to admit that believing the logic of scission is the eternal logic of the history is, like all states of consciousness, historically determined by ‘the life of the object’. Although it may have appeared clear to Badiou in the 1970s that the logic of all rebellion is simply classical negation, the

reality is that this was only a good representation of Khmer terror. The persistence of forms of rebellion in the post-Maoist context demands a more complex understanding. In my view, this requires admitting something that Badiou has always resisted: the existence of a third term in the operation of negation. Empirically, this means another ‘there’ from which to continue practical investigation. *Theory of the Subject*, to which we now turn, was Badiou’s first attempt to move beyond the impasse of anxiety. Its distinctive move is the supplementation of the Lacanian concept of anxiety with courage. This is crucial to Badiou’s articulation of an ontology of the subject, and adds a fourth vertex to the fateful triangle of concepts which articulate the dialectic of class and mass in the pamphlets—class law (superego), mass movement (anxiety), and communist ideas (justice). Ultimately, this involves an appeal to mathematical thought to avoid the dead end of the proletarian class consciousness of the pamphlets.

#### PASSING THROUGH ANXIETY

Although *Theory of the Subject* rambles across an eclectic range of source material and often shifts abruptly between registers and concepts, it is a systematic text because it addresses a single question throughout: how to preserve the revolutionary subject by thinking its eternal form. From the very beginning of the book, this involves a synthesis of the different problematics of Badiou’s thought from the 60s and 70s. The problem Badiou addressed in the 1960s was how to model the immanent transformation of historical structure. In the 1970s it was how to get out of historical structure once and for all. At the beginning of the 1980s, he continued to think the activity of the subject as freedom from deterministic causality, the key difference being that this was henceforth thought in terms of the agency of a localized instance within an unknowable totality rather than as the liberation of pure subjectivity from objectification in structure tout court. In terms of the abstract pair of concepts the book opens with, *Theory of the Subject* is essentially a logic of how to *force* a way out from circumscribed determinations of *place* according the understanding that whatever appears to be merely a system of places must, at some point in the past, have been forced to exist, and that every time a system of places is overcome, force is placed.

Badiou’s investigation into this is framed by the distinction between the *réel* of the cause and the *réel* of consistency that Lacan introduced 1975 to think the difference between the unity of the subject as the vanishing term of the symbolic and its unity as the knot of discursive registers. However, Badiou’s acute reading of Lacan’s statements regarding consistency reveals that ‘it remains haunted by the logic of loss and of

dispersion.’ (TS 244) The problem is that, in this configuration, nothing can replace the endless analysis of the cause; the only way out of the structural bind is to cut the symbolic chain that ties the loop of the imaginary to the real in the knot of consistency—the result of which is the attribution of consistency to the imaginary, which puts the subject back in its old place.

Badiou’s strategy for overcoming this impasse is to go back to the juncture of an alternative path in Lacan’s discourse, one that was named but not developed: Lacan’s rhetorical question from 1954 regarding the endless pursuit of the vanishing cause: ‘Where could this adjournment come to a stop? Do we have to extend the analytic intervention to the point of becoming one of those fundamental dialogues on justice and courage, in the great dialectical tradition?’<sup>53</sup> Badiou takes the existence in Lacan’s discourse of the nominal concepts ‘courage’ and ‘justice’ as an opportunity—they are there for the taking, so to speak—and proceeds to fill them out, and thereby produce an alternative conception of consistency that is undeniably rooted in Lacanian discourse.

The result is a tetrad, whose interlaced ‘strands’—anxiety, superego, courage, justice—are the ‘four fundamental concepts of the theory of the subject’ (TS 175). These concepts articulate the ways of understanding the relation between a structure and its empty place. In formal terms, anxiety relates to the empty place of a structure as the exceptional place from which the law draws its power. In a nod to Heidegger, Badiou remarks that, as a form of interruption of the law, anxiety ‘lets this order be as dead order’ (TS 291). The superego is the conservative reverse side of anxiety in which ‘life’ continues insofar as the existing law recomposes in the empty space: ‘the terrorizing prescription of placement.’ (TS 292) Courage ‘finds its support in the division of the law, in a wager on the real, in such a way that it effectuates the disorder as the order of meaning. The empire of courage is the life of excess.’ (TS 294) Instead of restoring the old law in the empty place, justice affirms the power of chance, ‘the subjective principle of the withering away of right.’ (TS 296) Courage and justice therefore balance the subject to avoid the fall from anxiety into the terror of the superego.

To this end, Badiou is obliged to forfeit mastery of anxiety to Lacan, which he does adroitly despite working solely with texts Lacan had published up to that point (Lacan had not published his seminar on the topic).<sup>54</sup> Badiou’s workaround draws on

<sup>53</sup> Lacan, Jacques, *Freud’s Papers on Technique*, trans. by John Forrester and ed. by Jacques-Alain Miller, *The Seminar of Jacques Lacan: Book I, 1953–1954* (New York: Norton, 1991) [1975], p. 199.

<sup>54</sup> Although copies of notes taken at Lacan’s seminars are known to have been circulating, there is no reference to the seminar on anxiety, or any of the other unpublished seminars, in *Theory of the Subject*.

two sources. At first, Badiou introduces the concept of anxiety with statements from Lacan's 1964 seminar *The Four Fundamental Concepts of Psychoanalysis* (published in France in 1974)—a text which recapitulates (and therefore gave Badiou access to) some of the key developments in Lacan's 1963 seminar *Anxiety*, which was first published in French in 2004 and has recently appeared in English translation. However, what is particularly interesting is that, when Badiou gets around to presenting his method for passing through anxiety in *Theory of the Subject*, he works out the condition of this passage through an engagement with a much earlier text: Lacan's essay 'Logical Time and the Assertion of Anticipated Certainty: A New Sophism' (1945). Badiou declares that this establishes an 'irreducible distance' between his thought and Lacan's (TS 248). At root this difference concerns the role of the imaginary in the logical form of subjectivizing anticipation in Badiou and Lacan's competing accounts of the famous prisoner game. For Badiou, the significance of this 'puerile game' (TS 249) is a lesson on acting without certainty, and this is essential to his theory of the political subject after the failure of Maoism.

A brief summary of the game will suffice here. There are three prisoners, a warden, and five discs—three white and two black. The warden attaches a disc to the back of each prisoner in such a way that each prisoner can only see the disc on the back of the other two. The warden then promises to grant freedom to the first prisoner who can prove the identity of the disc pinned to their back.

Lacan is only interested in the variant of this intellectual trial in which the warden pins white discs to the backs of the prisoners and in which all the prisoners think in the same way and at the same speed. All three prisoners arrive at the correct solution simultaneously and approach the exit in unison. For Lacan, this represents the ideal of a collective logic, what he calls 'the perfect solution' and 'a remarkable sophism'.<sup>55</sup> The irony, of course, is that the larger the number of players, the more tedious the logic becomes. In a footnote, Lacan runs through the steps required for this sophism in the four-player version of the game.<sup>56</sup> In fact, it is possible to arrive at Lacan's 'solution' with an indefinite number of players: each additional player adds one more step to the calculation.

With this set-up, each prisoner's initial experience is: 'I see two whites and the others are not exiting'. This is inconclusive but does provide material to speculate a line

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<sup>55</sup> Lacan, *Écrits*, pp. 162, 163.

<sup>56</sup> *Ibid.*, p. 175 n. 4.

of reasoning. Although this postulates a conclusion, the validity of this conclusion depends on a chain of unsubstantiated ‘ifs’. The chain is the following:

1. If I am a black, then the others see one white and one black.
2. If it is true that they reason like me they will think: ‘If I am also a black, then the white I see can see two blacks and should therefore know he is a white and exit.’
3. If at this point neither of the others exit, then they should both know that they are whites and exit in unison.
4. If they have followed this line of reasoning but have not left, then they are hesitating.
5. If they are hesitating, then I am not a black.
6. Therefore, I am a white.

Clearly, there is insufficient evidence to make the argument. However, this is the best the poor prisoner has and he must anxiously head for the exit without proof.

Acting without certainty is pivotal in the line of reasoning in both Lacan and Badiou’s accounts of the game. Ed Pluth and Dominiek Hoens have provided a useful analysis of this.<sup>57</sup> They point out that the Lacanian act is a peculiar type of ‘conclusion’: ‘the act is an element in the line of reasoning itself. The term “conclusion” for characterising this act is thus a bit misleading. It is not a conclusion that follows from premises: The term “conclusion” is simply something that brings the time of comprehending to a close.’<sup>58</sup> Pluth and Hoens conclude that ‘when it comes to an understanding of the act, both thinkers are quite similar’; the difference is that only Badiou draws ‘explicit political lessons from the kind of act described in “Logical Time”’.<sup>59</sup> It is true that Badiou’s example of this kind of act is revolutionary zeal: ‘When the popular insurrection breaks out, it is never because the calculable moment of this insurrection has arrived. It is because it no longer worth doing anything else except insurrect. This is what Lenin said: there is revolution when “those from below” do not want to continue as before, and when it is everywhere imposingly evident that it is worth more to die than to live lying down.’ (TS 257) This recalls the premise of *Théorie de la contradiction*: that there is reason in revolt wherever there are people with nothing to lose. The paradox of this approach is that people are apparently most powerful in

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<sup>57</sup> Pluth, Ed, and Dominiek Hoens, ‘What if the Other is Stupid? Badiou and Lacan on “Logical Time”’, in *Think Again*, ed. by Peter Hallward, pp. 182–190.

<sup>58</sup> *Ibid.*, p. 186.

<sup>59</sup> *Ibid.*, p. 190.

situations where they are so marginalised and subjected that they are effectively powerless within the existing order. As Francis Piven and Richard Cloward have argued, protest is not always a means available to the poor, and on occasions when it is, *'the forms that it must take, and the impact it can have are all delimited by the social structure in ways which usually diminish its extent and diminish its force.'*<sup>60</sup>

Badiou's reworking of the principle of reason in revolt in *Theory of the Subject* aims to purify it from constraint by social structure. He does this in terms of the Lacanian act, and there is evidence that he appeals to the virtue of mathematical reason. On two points, I think Pluth and Hoens underestimate the difference between *Theory of the Subject* and 'Logical Time', differences that actually call into question the usefulness of drawing political lessons from the Lacanian theory of action.

The first of these points is the relation of the act to the line of reasoning. Pluth and Hoens: 'The act is not a cut in the line of reasoning, or a break with the line of reasoning. As an interruption in the line of reasoning, the act is both part of it and something that suspends its logic, which also allows for it to be resumed after the act.'<sup>61</sup> I agree that this accurately summarizes Lacan's position in 'Logical Time'. In that account, the act (heading for the exit) precipitates supplementary visual evidence: as all the prisoners begin to move in unison they suddenly stop because their 'hasty' conclusion was based on the others' non-movement; they resume their movement but briefly stop again, this time confirming that they are indeed hesitating and all are whites since they would have no reason to pause for a second time if they could see a black. This evidence greatly simplifies the speculative chain of reasoning that I outlined above. Steps three, four and five now have visual evidence whose objective interpretation depends on a single single if: 'if we all think the same...'. In 'Logical Time', Lacan shows no intention of making an argument for this, as indicated in the subtitle of the text: 'A New Sophism'. 'Logical Time' does indeed suspend and resume the sophistical line of reasoning. The convoluted logic of implication condenses after the act into a run-of-the-mill implication: if we all think the same, then we are the same. The intersubjective 'we' that results from this is, of course, pure illusion: prisoner A believes that he is able to see himself through the eyes of prisoners B and C by taking their halting as an unequivocal sign of hesitation and that they see he is a white. The

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<sup>60</sup> Piven, Francis Fox, and Richard A. Cloward, *Poor People's Movements: Why They Succeed, How They Fail* (New York: Vintage, 1979), p. 3.

<sup>61</sup> Ibid., p. 186.

problem, as Badiou is quick to point out, is that if this is supposed to be true, the prisoners have no reason to interrupt their movement in the first place: ‘the fact that the other does not move except when I do cannot lead me to doubt. It is even the exact opposite. For it only indicates that he reasons like me [...] As a result my conclusion, which was already certain, is purely and simply confirmed: surplus certainty and not suspended doubt.’ (TS 253)

For Badiou, by contrast, the subject who acts does have the potential to make the argument. This hinges on the difference between the haste of an act of courage and the haste of an act of pure anxiety. Simple anxious haste forces a decision by taking ambiguous phenomena (the standing still of the other) as a clear-cut sign. Overwhelmed by anxiety the subject is unable to think outside the logic of the game. The pressure to conclude becomes unbearable and ‘with a heaving chest’ this subject wilfully overlooks what Badiou calls ‘the divisible significance of the message’ in order to hastily conclude ‘according to the stiffened and lifeless algebra’ (TS 257, trans. modified). The simply anxious subject can only short-circuit the game by blocking its ‘rigid law under the effect of too-much-of-the-real’ (TS 258). Tempting fate, the simply anxious subject believes that its being will turn out to have been determined by the custodian of the law. ‘The correlated subjective process represents the prison warden as the key to my very being.’ (TS 257) Courageous haste, by contrast, ‘finds support in strategic anticipation without having managed to reach a well-grounded certainty.’ (TS 258) Badiou’s courageous prisoner never loses sight of the essential ‘topology’ of the game—that each prisoner’s reasoning is overdetermined by ‘a set of subjective neighbourhoods (of speed, haste, stupidity...)’ (TS 255). On this basis, the actions of the others are never clear-cut but always more or less ambiguous. No amount of supplementary visual evidence will ever add up to a proof. As ‘a good topologist’, the courageous prisoner gambles ‘that my competitors are more or less my peers’ and that ‘the only way to get away is by *not waiting* for the end of the reasoning, which they would otherwise accomplish at the same time as I. The possible undecidability of the outcome is what I calculate must be broken, through the essential confidence in the fact that I will complete the reasoning in front of the director [*le directeur*].’ (TS 258, trans. modified). Thus, Badiou’s courageous subject believes that justice transcends the rules of the game. However, the figure of justice (the ‘director’) to whom the courageous subject makes his appeal remains obscure.

The reason that Badiou’s courageous subject has a chance of making the argument is because, in its development beyond the prisoner apologue, Badiou’s

courageous subject appeals to mathematical ‘justice’, and specifically to the retroactive argumentation of set-theoretical forcing. I will discuss this further in chapter 4, however, it is important to introduce the basics of this technique here to understand the virtue of mathematics in *Theory of the Subject*.

Broadly speaking, forcing is a mathematical technique which uses the resources of a known set to expand the limits of the constructible set theoretical universe. Although there are actually many types, Badiou has always stuck close to the work of its inventor, Paul Cohen. In his famous works between 1963 and 1966,<sup>62</sup> Cohen developed this technique to demonstrate the surprising result that the axiom of choice and the continuum hypothesis are undecidable in Zermelo-Fraenkel Set Theory. Forcing generally uses the language of set theory to establish a generic set of conditions which regulate the articulation of a circumscribed extension beyond the existing limits of knowledge. To do this the mathematician also has to posit the existence of hitherto inexistent material with which to construct the model. Forcing is therefore a bridge from the immanent to the transcendent: the conditions of what is beyond are immanent to the known, but the constructed beyond is itself transcendent in the sense that some of its material did not exist in the universe as it was previously known. The key point in relation to my discussion of the prisoner game is that set theoretical forcing is irreducible to classical implication (TS 272). This is because forcing appeals to the power of generic statements to avoid properties of a known model by supplementing it with new material which redefines our understanding of that model as a whole. The argument crystallizes retrospectively when the whole can be understood as conditioned by the set of generic statements. The most famous example is Cohen’s original experiment in which he constructed an extension where the continuum hypothesis fails. This is crucial because, as we have seen, Lacan’s version of the game demonstrates only the sophisticated structure of the unsubstantiated implication: ‘if we all think the same, then we are the same.’ Badiou’s version of the game draws on mathematical virtue to expand what is understood as the same by learning to think differently.

From the standpoint of the act, however, it is far from certain that the argument will crystallize. The prisoner has a chance of making the argument provided he places

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<sup>62</sup> Cohen, Paul J., ‘The Independence of the Continuum Hypothesis’, *Proceedings of the National Academy of Sciences of the United States of America*, 50.6 (1963) 1143–1148.

Cohen, Paul J., ‘The Independence of the Continuum Hypothesis II’, *Proceedings of the National Academy of Sciences of the United States of America*, 51.1 (1964) 105–110.

Cohen, Paul J., *Set Theory and the Continuum Hypothesis* (New York: W.A. Benjamin, 1966).



his confidence beyond the rules of the game. For Pluth and Hoens this means that, like Lacan in ‘Logical Time’, Badiou thinks ‘the act is not without the line of reasoning.’<sup>63</sup> In my view, however, this can only be said of the simple anxious act as Badiou describes it. By contrast, the virtue of Badiou’s courageous act is that it is not without an argument. As we have seen, the essential line of reasoning in Lacan’s sophism is simply without an argument. In this sense, the courageous act anticipates an argument which prevails over the sophistical line of reasoning. Badiou: ‘I hurry for the simple reason that being the first to exit is the only real that matters. The act takes precedence over [*prime*] the line of reasoning.’ (TS 257)

Finally, Badiou’s courageous act is a hyper-anxious in the sense that it negates the sophism of the standard Lacanian act from within. This is the root of Badiou’s hyper-Lacanianism. The resourcefulness of Badiou’s thought must be applauded here. Without having read Lacan’s seminar on anxiety he was able to subvert its central thesis: ‘*anxiety is not without an object.*’<sup>64</sup> Badiou’s Promethean cunning subverts this formulation by specifying that an argument for (or against) the symbolic object crystallizes in the process of set theoretical forcing. Although, initially, forcing is not without an object because the truth of the generic extension is undecidable, as the extension is constructed its truth becomes decideable.

The second point where Pluth and Hoens underestimate the difference between Badiou and Lacan concerns their claim that the act concludes the time of comprehension.

Badiou makes short work of showing that Lacan’s account does not involve genuine haste and has ‘only one time’, which is ‘transitive to the act of concluding.’ (TS 253) The question is whether Badiou’s alternative is any different. In my view, Badiou’s courageous act is without time in the sense that it is the affirmation of chance, which is *intransitive* to the duration of reason. To see why, we need to analyse the intertwining of what Badiou calls the two temporalities of ‘subjective process’ and ‘subjectivization’ with the processes of ‘algebra’ and ‘topology’.

In Badiou’s account, what matters is what Bachelard called ‘the gift of the fertile instant’.<sup>65</sup> For Badiou, there is no single duration which gives coherence to the line of

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<sup>63</sup> Ibid., p. 187.

<sup>64</sup> Lacan, *Anxiety*, p. 131.

<sup>65</sup> Bachelard, Gaston, *Intuition of the Instant*, trans. by Eileen Rizo-Patron (Evanston: Northwestern University Press, 2013) [1932], p.32.

reasoning because the intellectual difference between the prisoners ‘does not fall under any stable temporal measure’ (TS 256). In my view, it makes more sense to say, with Bachelard, that, in Badiou’s account, the act’s ‘true reality is the instant. Duration is but a construction lacking any absolute reality. It is forged from without by memory, that preeminent power of the imagination which seeks to dream and relive, but not to understand.’<sup>66</sup> Within the line of reasoning the other’s act confirms nothing to the prisoner who supposes the situation to be structured by intellectual difference; it equally possible that the other has decided to exit without a reason (he is a ‘cretin’) as he thinks the same as me. However, taken as ‘a disorder in reasoning’ (TS 256), the other’s act gives the courageous prisoner the confidence to place a bet on a way to understand the game without concluding its line of reasoning. Courage is the reverse of anxiety. While anxiety is the mode of subjectivization in which the subject knows that the law will not sustain him to the end yet continues to place his trust in it, courage is the mode of subjectivization which affirms the moment of suspension of the law as the point where another consistency becomes possible without resuming or concluding the old line of reasoning: ‘it is the interruption of the algorithm, and not its execution, that has the subjectivizing effect.’ (TS 257) Courage draws support from the Kantian maxim of enlightenment: ‘Have courage to make use of your *own* understanding.’<sup>67</sup> Specifically, courage takes ‘a moment’s advance, by a wager on the real.’ (TS 258) The wager interrupts the temporality of the process by which the subject decided to affirm chance, but this does not mean that that process is concluded. Time resumes in subjective process after the bet is placed: either the old law returns (superego) a new law begins (justice). In the case of the superego, the act was not conclusive since the old law continues; in the case of justice, the act was conclusive and the subject finds itself in the space of a different law, in another time. For Badiou then, it is only the act of justice that is conclusive regarding the old law. Badiou quits the prisoner game once he has established this as a possibility. He doesn’t say how the courageous prisoner might brush aside the representative of the superego—the ‘sadistic’ warden (TS 248)—to make his appeal to the director. What he does say however, is that the courageous subject is confident that ‘in the long run, the subjective process will recompose a world

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<sup>66</sup> Ibid., p. 12.

<sup>67</sup> Kant, Immanuel, ‘An Answer to the question: What is enlightenment?’, in *Practical Philosophy*, trans. and ed. by Mary J. Gregor (Cambridge: Cambridge University Press, 1996), p. 17.

in which the law must wither’, and that this is ‘the topological upheaval of an algebra’ (TS 258). How though, does topological ‘direction’ guarantee justice?

To overcome Lacanian anxiety Badiou turns to the Hegelian ‘for-itself’ as a template for subject not bound by the relation ‘being not without having’, and develops a mathematical interpretation of Hegel’s ‘materialist’ conception of the unity of ‘repulsive force’ and ‘attractive force’. For Hegel, ‘matter *has* these two forces *in itself*’<sup>68</sup> The One is intelligible because, although it formally divisible into two, content is determined by the absolute singularity of thought. In other words, materialism is revealed to be idealism because ‘consciousness already contains in itself as consciousness the determination of being-for-itself; that is, it has *in it* the content of its object [*Gegenstand*], which is thus an *idealization*; even as it intuits, or in general becomes involved in the negative of itself, in the other, it *abides with itself*.’<sup>69</sup> The key point is that, the subject is ‘for itself’ when it sublates otherness whilst remaining at home: ‘the side of reference to another, to an external object [*Gegenstand*], is removed [*entfernt*].’<sup>70</sup> Badiou’s take on this, is a double articulation of mathematical power: ‘the algebraic disposition and the topological disposition.’ ‘As for the subject, its—materialist—argument is inscribed in this intersection.’ (TS 209) This argument is none other than Cantor’s theorem of ‘topological excess’: ‘The cardinality of the set of parts of E is always superior to the cardinality of E itself.’ (TS 260, 261). The main difference between this and Hegel’s conception is that instead of the absolute, the ‘universe’ is overdetermined by generic disorder. ‘The structure of the proof of inconsistency for the set of all sets—for absolute multiplicity—operates at the juncture of algebra and topology.’ (TS 217)

It is worth pausing to clarify Badiou’s narrow conception of the pair algebra/topology in *Theory of the Subject*. Algebra, Badiou declares, is principally concerned with the combination of elements under a law, while topology is more interested in ‘the surroundings’ of a term and the degrees of its isolation from or adherence to others (TS 211). According to Badiou, while ‘algebra proceeds to the systematic study of the “interesting” relations between the *elements* of a set’, ‘[t]opology works perforce on the *parts* of a set, considered as families of

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<sup>68</sup> Hegel, G.W.F., *Science of Logic*, trans. by George Di Giovanni (Cambridge: Cambridge University Press, 2010), p. 146.

<sup>69</sup> *Ibid.*, p. 127.

<sup>70</sup> *Ibid.*, p. 127.

neighbourhoods of an element' (TS 210, 211) 'If the master concept of algebra is that of the law (of composition), topology is based on the notion of neighbourhood.' (TS 211) In essence, partial excess does not emerge at a point but through the network of relations between known points.

The salient point is that topology, as Badiou conceives it, has the distinct virtue of being able to investigate a space through a network of neighbourhoods without knowing its rule of consistency in advance. This is the advantage of what Badiou calls the 'empiricist' character of topology (TS 209). To 'empiricize' topologically means to investigate neighbourhoods without the condition that their inclusion in the topological whole must preserve a certain algebraic law of composition. This does not mean that the topologist is free to wander off into lawless space, rather that the law is placed in abeyance with every step in the dark. Part way through an investigation into an unknown space a topologist may be able to say that, so far, this space conforms to the rule of composition of a known species of structure. However, what distinguishes Badiou's topologist from his algebraist is that the former is not worried about the possibility that mapping another neighbourhood might render this or that law void across the space as a whole.

We are now in a position to say that the 'topologization of algebra' passes through anxiety by neutralizing the threat of lawlessness. Once the subject understands that disorder has structured its existence from the very beginning, the subject must affirm disorder as the structural principle of what it means to be one and other. In pure mathematical space it is possible to wander through neighbourhoods of the outplace in the confidence that with every step a law will recompose. Topology reassures because, although it may turn out that the space under investigation is not what it was supposed to be, it will also become clear that an inhabitant of a neighbourhood of that space was always already in that space, they just didn't know it. This is why 'topology alone is capable of measuring the fact that one consistency comes after another' (TS 259).

There is one further point that remains to be addressed: if the motto of Badiou's topologist is 'What matters is more than all that is said.' (TS 209) then isn't the 'topological dimension of language' (TS 303) just another name for what Judith Butler has called Kierkegaard's style of 'indirect communication'? As Butler understands it this is the paradoxical task of giving finite written form to the theological infinite; a task

which is bound to fail but dramatizes failure by enacting the limits of language.<sup>71</sup> The sceptic will claim that Badiou's pass through Lacanian anxiety actually returns the subject to existential *angst*. Along similar lines, it might also be said that the author of *Theory of the Subject* is a moralist like Sartre, in the sense that he is first and foremost a writer.<sup>72</sup> The first point of clarification is that, in *Theory of the Subject*, Lacan is acknowledged as the master of this drama due to his use of schemas to represent the *ideal* of formalizing concepts beyond the equivocations of language. In fact, Badiou admits that this slide into the imaginary is inevitable at the level of the topos of the subject as a whole. In the seminar titled 'Schema' towards the end of *Theory of the Subject*, he goes through the motions of drawing a graph of 'the unschematizable' (TS 304). However, this is merely contrived despair. Badiou's use of Cantor's theorem for thinking excess affirms the mathematical ability to write the infinite beyond any reasonable limit. In that realm, thought can be infinite outside the drama of indirect communication. It is possible, I concede, to view Badiou's graph of the subject (TS 328) and other framing devices throughout the book as the dramatization of the necessity to act in 'sin', to inadequately fix a concept in graphic form. However, none of these drawings should distract us from the fact that Badiou's ethics of not giving in is at root the refusal of equilibrium, what Hegel called the 'stubbornness' [*Hartnäckigkeit*] of the understanding;<sup>73</sup> for Badiou, the obstinate thought of partial excess. The problem with such a successful conceptualization of abstract freedom is rather the associated risk of disengaging political theory. Badiou's confidence—a 'prepolitical arrangement'—is rooted in 'the structure of the subject', not in any worldly capacity. 'The world only ever offers you the temptation to give in.' (TS 322, 318). Specifically, this move allows Badiou to withdraw to a theoretical position that privileges '[s]pace, in its superiority over time' in order to avoid being 'carried away' by history (TS 308, 303). In short, the cost is the return of theory to a position of repose.

#### MATHEMATICAL VIRTUE

In this final section I will argue that Badiou's return to mathematical formalism in *Theory of the Subject* is essentially a recasting of the problem of political anxiety such

<sup>71</sup> Judith Butler, 'Kierkegaard's Speculative Despair', in *Routledge History of Philosophy*, ed. by G.H.R. Parkinson and Stuart Shanker, 10 vols (London: Routledge, 2008), VI, 376.

<sup>72</sup> Edouard Morot-Sir, 'Philosophy and auto(bio)graphy', in *Sartre*, ed. Christina Howells. (London: Routledge, 1995), p. 191.

<sup>73</sup> Hegel, *Science of Logic*, p. 140.

that it can be approached and treated within the workspace of mathematics. My discussion will be framed by Bosteels' claim that all the mathematical concepts in *Theory of the Subject* are overdetermined by politics. I will argue that it is important to distinguish the overdetermination of mathematical concepts by the experience of the failure of Maoism from the use of mathematical concepts for the purpose of anticipating a politics of the future. I will show that the concept of recomposition—'forcing'—is not overdetermined by the failure of the politics of the 1970s and that, instead, it prescribes a mode of recomposition that is irreducible to the binary logic of the pamphlets. Unlike Bosteels, I think Badiou's recasting and treatment of the problem of anxiety with mathematical concepts in *Theory of the Subject* involves a reversal of priorities: specifically, political thought becomes subordinate to what Badiou calls mathematical 'auto-analysis' (TS 148)

This treatment of political anxiety with mathematics is what I will call Badiou's mathematical politics, and is often referred to as Badiou's Platonism. My assessment of the Platonism of Badiou's mathematical politics will be the topic of chapter 4 and will therefore not feature here.

Badiou took the failure of revolutionary politics at the end of the 1970s hard. He has even recently described the failure of Maoism as a 'total failure'.<sup>74</sup> Today, in what he calls the post-revolutionary context, political justice simply does not exist: 'From a philosophical point of view, there exists no justice whatsoever in the contemporary world. From this point of view, we are entirely without virtue in the sense given to this word by our great ancestors the Jacobins.'<sup>75</sup> I agree with Bosteels that the entire effort of his political theory since the failure of Cultural Revolution has been to think the virtue of communist justice indirectly. In *Being and Event*, the concept of mathematical justice clearly takes a leading role. In my view, however, *Theory of the Subject* was not only his first experiment in this direction, it already makes the turn to mathematical politics regarding the idea of recomposition of the structural whole.

In the previous section, we saw how forcing and the powerset function are related to courage and justice. In addition, we need to establish that forcing is irreducible to the binary logic of the pamphlets because it involves a different type of negation.

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<sup>74</sup> Badiou, *Controversies*, p. 44.

<sup>75</sup> Badiou, Alain, *Philosophy for Militants*, trans. by Bruno Bosteels (London: Verso, 2012), p. 31.

Earlier in this chapter we saw that the logic of scission in the pamphlets is a type of classical negation, or non-implication. There, history is the system of permutations in which distinct states of dictatorship are related through implications (or weak negations) of the underlying principle of class dominance. In that logic, the impossible end of history is the classical negation of this principle. Communism implies no exploitation and therefore can only be ‘true’ if exploitation is rendered entirely ‘false’. In this sense, revolution is a reversal of the incompatibility. By contrast, in the mathematical logic of recomposition in *Theory of the Subject*, justice breaks with ‘the deterministic effects of implication’ (TS 272). The ‘generic virtue’ of forcing, Badiou remarks, ‘teaches us to say no differently.’ (TS 272).

Badiou sketches out this alternative type of negation in very abstract terms. The type of ‘machinery’ at stake is not state apparatuses (as in the pamphlets) but the logic, or ‘language’, of Zermelo Fraenkel set theory. Forcing extends of the universe of sets beyond the limits prescribed by its existing language. Typically, forcing takes a model of Zermelo Fraenkel set theory in which a certain formal theory or hypothesis holds, and, in piecemeal fashion, defines an extension to this model whose contents are free from the logical constraints of the formal theory or hypothesis. The key point for the purpose of my discussion is that forcing does not destroy the model that it extends, instead it evacuates its characteristic logic. The extension includes the material of the existing model and supplements it with a set of generic statements. The generic statements are composed of posited symbolic material and have to be carefully designed. A generic element is defined over the existing model and avoids all properties that can be defined in that model, i.e., properties that can be defined by formulas in the existing language that speak about sets belonging to the existing model.

In *Theory of the Subject* Badiou expresses this in topological terms: ‘the forcing of the negative—of non-q—as opposed to the incompatibility induced by its implication, is the result of the fact that nothing in that which *locates and encompasses* the condition p forces the truth of q.’ (TS 273, my emphasis) Of course, it is not possible to extend every model of Zermelo Fraenkel set theory with a generic supplement. Generic supplements can be constructed on models in which the set of conditions of implication is sufficiently weak to permit the mathematician to surpass it with a stronger, generic, set of conditions. Badiou puts it like this: ‘in the logic of forcing, that p forces non-q means that there exists no condition that is stronger than p and that forces q. It is from the point of an in-existent relative to the statement p that the forcing of non-q is determined.’ (TS 272–3) From the point of view of the beginning of

this process, the generic set of conditions is ‘inexistent’ in that the language of the existing model has nothing to say about it; only from the point of view of the end of the process, with the update to the language of the model, will it be possible to speak about the determination of the generic model.

To conclude, the type of negation involved in forcing is not the affirmation of an alternative that is absolutely incompatible with an existing condition. Instead, the negative can be forced because the condition is sufficiently weak to permit the mathematician to make a choice to not reproduce the properties of that model in the extension and, in the process, to change the way the existing model is spoken about. Unlike the absolute incompatibility of the condition and its negative in implication, in forcing, the existing condition is not rendered absolutely false—instead its power is limited to the construction of models that preserve the qualities of the existing model. The power of the generic surpasses this because it holds in the domain of the existing model and in the codomain of the extension. In this sense, the power of the generic is irreducible to the more limited power of implication, and it is for this reason that the logic of justice in *Theory of the Subject* is irreducible to the dualistic logic of the pamphlets.

At this point, I should clarify the difference between my reading of *Theory of the Subject* and Bosteels’. I agree with Bosteels that the theoretical root of Badiou’s later philosophy of the event is Badiou’s longstanding engagement with the Althusserian problem of structural causality, however, despite the existence of some links between *Being and Event* and *Theory of the Subject*, I think these two works belong to distinct periods. I also privilege ‘The (Re)commencement of Dialectical Materialism’ in Badiou’s work, which, as Bosteels puts it, pinpoints the problematic of ‘an unarticulated tension’ in Althusser’s theory ‘between politics as the fundamental practice conditioning philosophy from the outside, and science as the only safeguard, within philosophy, against the ideological reinscription of this political intervention, the importance of which is then obscured.’<sup>76</sup> I also agree that *Theory of the Subject* is the root of Badiou’s alternative to the impasse of the absent centre of structure so dear to Žižek. However, I do not agree with Bosteels’ belittling of the role of mathematics in Badiou’s philosophy, and I remain unconvinced by Bosteels’ claim that the criticism of destruction in *Being and Event* ‘unwittingly allows Badiou’s thought to participate’ in

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<sup>76</sup> Bosteels, Bruno, ‘Alain Badiou’s Theory of the Subject: The Recommencement of Dialectical Materialism? (Part 1)’, *Pli*, 12 (2001), p. 206.



the celebration of ‘mortal life without truth’.<sup>77</sup> That seems unlikely given that the truth procedure of forcing—the paradigm of generic inhumanity—is even more important in *Being and Event* than in *Theory of the Subject*. Although Badiou prefers the term ‘subtraction’, the idea of ‘destroying’ the language or logic of a circumscribed region of set theory is clarified in *Being and Event*. The confusion on Bosteels’ part stems from his claim that, in Badiou’s set-theory ontology, ‘All the stuff of a given situation cannot be accounted for in the sole terms of belonging’:<sup>78</sup> actually, it can, just not in advance. I also doubt Bosteels’ claim that Badiou’s passage through the impasse of the vanishing cause is simply the materialist alternative to the idealist recognition of structural impossibility.<sup>79</sup> Badiou’s solution is ‘materialist’ in the Lacanian tradition of the materiality of the signifier. However, we should remember that in ‘The (Re)commencement of Dialectical Materialism’ Badiou cited Kant to affirm the intellectual origin of ‘the pure *fact* of science’ (RDM 169) on which the practice of formalized writing is based. As such, Badiou’s materialism is, at root, idealism.

More specifically, my disagreement with Bosteels centres on the question of how to understand the way in which Badiou initially coped with the failure of Maoism. This boils down to the role of mathematical concepts in Badiou’s symbolic treatment of the political anxiety that remained at the beginning of the 1980s. My view is that Badiou’s use of mathematics in *Theory of the Subject* is not simply overdetermined by politics because mathematics has a privileged role: it provides the form of anticipation. Specifically, the type of recomposition of the social whole in the future of politics is anticipated via the entirely abstract theory of Cohen forcing—for which there is no equivalent in political practice. In this sense, mathematical experience is ahead of political experience.

To be clear, Badiou’s point is not that mathematics provides a form which can be applied in political practice to shape the world, it is rather that there is an ‘apparent abutment’ of mathematics and dialectical materialism ‘in a chance-like coincidence.’ (TS 149) This is not only because certain mathematical concepts can be understood as symptoms of political concepts—for example, the symptomatic overdetermination of the concept of ‘torsion group’ by that of the Maoist party (TS 150)—but because

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<sup>77</sup> Bosteels, Bruno. ‘Alain Badiou’s Theory of the Subject: The Recommencement of Dialectical Materialism? (Part 2)’, *Pli*, 13 (2002), p. 191.

<sup>78</sup> *Ibid.*, p. 201.

<sup>79</sup> *Ibid.*, p. 206.

‘mathematics is the science of the real’ (TS 154). In purely abstract terms, mathematics can think the real beyond the impasses of history because it objectively elucidates the ‘surplus brilliance’ (TS 154) of the mathematical concept above and beyond everything that passes as knowledge. In this regard, the mathematical signifier is a symptom only insofar as it belongs to a mathematical text which ‘is in the position of analyst for some of its own words—as being symptomatic of itself.’ (TS 148)

Bosteels claims that a symptomatic reading of *Theory of the Subject* understands how its mathematics is overdetermined by something else: ‘*Theory of the Subject* also approaches certain mathematical concepts such as “forcing”, “torsion”, and the “power” of a set’s cardinality from a symptomatic angle rather than in terms of their intrinsic rationality within mathematics.’<sup>80</sup> However, Bosteels’ interpretation is hard to square with Badiou’s statements about mathematical ‘auto-analysis’ (TS 148). He presumes that *Theory of the Subject* is essentially a politically overdetermined text:

I would add that the mathematical signifiers can be interpreted as symptoms only if and when we have access to that which—most often though not always politically—overdetermines their role as symptoms. That is, *we must already understand why these signifiers are symptoms in the first place, and such an understanding in this instance is political rather than mathematical*. Between mathematics and politics there would thus be a relation of active conditioning or overdetermination and not purely one of metaphorical affinity.<sup>81</sup>

The problem with this approach is the assumption that we already know how the mathematical text is politically overdetermined. In the case of *Theory of the Subject*, this would mean that all of its mathematical concepts are overdetermined by the political experience of the 1970s, when, to the contrary, Badiou’s entire effort is geared towards anticipating the future of revolutionary politics beyond the failure of that sequence. Bosteels’ approach to the overdetermination of mathematical concepts in Badiou’s philosophy seems to me to be based on a fundamental misunderstanding of Badiou’s relationship to mathematics in general, but also to miss the point of his return to mathematical formalism after the failure of Maoism. As a rule, whenever the question of the relation between pure mathematics and other realms of thought has arisen explicitly in Badiou’s thought, he always grants mathematics the determinant role. The pamphlets are an alternative not the exception to this: they prioritize direct political

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<sup>80</sup> Bosteels, *Badiou and Politics*, p. 38.

<sup>81</sup> *Ibid.*, p. 39, my emphasis.

experience but make no explicit appeal to pure mathematics. In my view, Bosteels' approach actually undermines his own claim about the continued relevance of *Theory of the Subject* as a militant text. If, as Bosteels presumes, we already have access to the alleged overdetermining politics (the politics of the 1970s), what point would there be in reading about how this can be expressed in mathematical (and poetic) form, other than to delay direct political action and consign *Theory of the Subject* to the shelf of logics of failed revolt? Instead, I think the distinctive feature of the politics of *Theory of the Subject* is the way in which mathematics supplements the lack of existing political knowledge and thus helps political subjects anticipate a new situation. Of course, mathematical form is used in *Theory of the Subject* to clarify ideas from Badiou's political theory of the 1970s, but the point is that mathematics also does more than this, it anticipates the possibility of a future politics that is irreducible to the failed politics of the 1970s.

Bosteels refers to the polemical remarks in the opening seminar of *Theory of the Subject*. In response to the predictable question of why begin with formal algorithms when what is at stake is political justice, Badiou parries: 'as a Marxist, I in fact posit that the contents drain the forms, and not the other way around. What is certain is that the dialectical formulations are rooted in an explicit political practice.' (TS 15) However, this does not mean that *Theory of the Subject* contains an explicit account of the anticipated post-Maoist form of political practice. When this practice arrives, it may well evacuate the abstract form of its anticipation, but since, in the meantime, it remains unknown, all we have is its metaphorical anticipation via mathematics. In sum, it is my view that, in *Theory of the Subject*, mathematics juts out beyond explicit political practice in anticipation of the retroactive clarification of the dialectical formulation of post-Maoism. This does not mean that there are mathematical concepts which are not overdetermined by politics in *Theory of the Subject*, but rather that mathematical concepts can be overdetermined by political practices that do not yet exist. In this sense, and against Bosteels, a mathematical concept can be a symptom of something that we cannot already access in other realms.

This is the case with 'forcing' in *Theory of the Subject*, for which there is no explicit political practice. The revolution of illegal workers is supposed in the form of indefinite anticipation: 'A protest struggle in which the immigrants, represented as a particular social force, demand the same political rights as the French, forces the inexistent whose national multiplicity determines its closure as imperialist, that is, forces the immanent popular internationalism.' (TS 264) Politically, *Theory of the*

*Subject* stands at the impasse, frustrated by the existing politics of rights: ‘On that account, the unity of the French and immigrants would be limited to the show of solidarity granted by a few reasonable have-rights to the rebellious without-rights. It is the feeble unionist politics of “support” for a social force.’ (TS 265) Although *Theory of the Subject* does specify that this requires refocusing on the politics of the French citizen subject, the mathematics of forcing does not help us think beyond the national configuration of this problem. This is where Badiou’s analysis of the ‘political topology’ (TS 222) of the working class factory revolt comes into play. The way in which the factory intersects other neighbourhoods ‘in its *popular* surrounding’ apparently defines ‘the form of internationalism immanent to the term “revolt”.’ According to Badiou, the greater the adherence of the revolt to the people of France as a whole, the more it includes groups whose rights are marginalized by the existing French state, the more it tests the inclusiveness of the law. The maximum degree of this process is the intersection of the factory revolt with the neighbourhood of the ‘illegal worker’ (TS 222) If this took place, the ‘French’ character of the revolt would be rendered void.

The problem with this scenario is that it maps a very limited form of internationalism: it says nothing about political practice across geographical borders. By definition then, this rhetoric is indifferent, for example, to the present situation on Europe’s borders where boatloads of people are drowning in the Mediterranean and masses are fenced off in the east. It remains unclear how, in the absence of a global superstate, the theory of the inclusion of ‘inexistent’ people in the nation state has anything to say about people in transit, those barred from entry, or even prevented from making the journey; in short, those who have even less to lose than those who are already ‘in’. This problem is actually rooted in the immanence of partial excess in the mathematical theory: the powerset concept can only think that which was always already ‘there’.

Finally, the problem with Bosteels’ approach to the symptomatic status of mathematical concepts in *Theory of the Subject* is that, he compels us to overdetermine the concept of forcing with an explicit political practice, and in the absence of an explicit revolutionary practice of the inexistent worker, the Cultural Revolution would seem to be the closest available. However, this cannot be right because, as we have established, the logic of forcing is incompatible with the Manichean logic of the Cultural Revolution that Badiou presented in the pamphlets in the 1970s. Taking the Cultural Revolution as the overdetermining political practice is especially problematic because whatever concept occupies the place of the successful recomposition of the

social whole will always be without an explicit political practice since its role in the transference is to fill the void at the heart of the overdetermining politics. Clearly, this would amount to the failure to dissolve the anxiety of this politics. Badiou's strategy in *Theory of the Subject* is to avoid the political anxiety of the 1970s by displacing the real from politics to mathematics; or if you prefer, that the political being of the subject is mathematically, rather than historically, prescribed. My view is that, insofar as this produces a calming effect, it does amount to a passage through this anxiety, but one that is achieved through a reversal of the relation between politics and mathematics as Bosteels understands it.

Today, Badiou is clear that the absence of justice in politics means that we need to make a 'classical detour through mathematics. Mathematics is probably the best paradigm of justice that one can find, as Plato was able to show very early on.'<sup>82</sup> For Badiou, the foundational status of axiomatic choice in mathematical thought means that it involves 'a kind of primitive liberty', in essence, the freedom to think. Furthermore, the human intellect is able to demonstrate that, within this realm, 'a proof is a proof for anyone whatsoever, without exception, who accepts the primitive choice and the logical rules. Thus, we obtain the notions of choice, consequences, equality and universality.'<sup>83</sup> Furthermore, Badiou has also recently confirmed (in the preface to the 2007 edition of *Concept of Model*) that he rediscovered 'the rectifying [*rectificatrice*] and appeasing [*pacifiante*] function' of mathematics at the beginning of the 1980s.<sup>84</sup> This return to mathematical formalism and shift to ontology was Badiou's way of compensating for the loss of justice at the beginning of that decade, and is what I call the mathematical virtue of *Theory of the Subject*.

To conclude this chapter: we should prioritize the role of mathematics in *Theory of the Subject* because its account of the subjective ability to pass through anxiety is based on the peculiar power of mathematical sets. The subjective power of recomposition is no longer thought as class consciousness of the law of history (as in the pamphlets), but as the prescribed excess of parts over elements of a set in general.

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<sup>82</sup> Badiou, *Philosophy for Militants*, p. 33.

<sup>83</sup> *Ibid.*, p. 33.

<sup>84</sup> Badiou, Alain, 'Préface de la nouvelle édition' in Badiou, Alain, *Le Concept de Modèle* (Paris: Fayard, 2007), p. 17.

## Set-theory Ontology and History

The aim of this chapter is to assess the Platonism of Badiou's ontology and to understand the constraints that this puts on his conception of politics.

This chapter has three sections. The first discusses the Platonism of Badiou's ontology as set out in *Being and Event* (1988). I argue that this ontology avoids the problem of *angoisse* familiar from the dialectic of *Theory of the Subject* by replacing history with a logic of retroaction whose model is set-theoretical forcing. The argument of the second section is that the theory of object developed in *Logics of Worlds* (2006) is designed to preserve the privilege of set-theory ontology because Badiou's use of category theory for articulating the retroaction of the object on ontology is limited to the exposition of the immanence of logic to the multiple, and stops short of the possibility that generic multiples can be intuited through the category of sheaf. In the final section, I turn to Badiou's recent work on the idea of communism and his application of his theory of the object to the recent revival of mass rioting in *The Rebirth of History* (2011). I hope to show that the privilege of mathematics in Badiou's philosophy has shaped his conception of politics in which ideation is an anxiety-inducing experience.

Regarding the relation between *Being and Event* and *Logics of Worlds*: it is important to remember that when Badiou published *Being and Event* he believed that he 'had actually achieved what he set out to' (BE xi); namely, make the following argument: ontologically, situations are 'pure indifferent multiplicity' and truths only emerge in the form of 'strictly incalculable' events whose generic being is pieced together by a subject's 'active fidelity' (BE xii–xiii). With the publication of *Logics of Worlds* eighteen years later, *Being and Event* was retroactively designated the prequel. In relation to the argument of *Being and Event*, the sequel makes substantial revisions that follow from a pivotal admission: that a theory of the appearance or 'being-there' is necessary. In turn, this commits Badiou to a recuperation of the object, whose 'destitution' he had so confidently announced in 'On a Finally Objectless Subject'

(1988),<sup>1</sup> a text that distills the theory of the subject in *Being and Event*. Broadly speaking, I agree with François Wahl that what makes *Logics of Worlds* interesting is its partial fidelity to *Being and Event*: the theoretical twist that is required to prepare a phenomenology of sorts—a ‘calculated’ or ‘objective’ phenomenology (LW 38)—so as to not budge an inch regarding ‘the closure of constitution’.<sup>2</sup>

#### BADIOU’S PLATONISM

In 1992, Badiou wrote: ‘The use of the term “Platonism” is a provocation, or banner, through which to declare the closure of the Romantic gesture’.<sup>3</sup> In this sense, the basic move of Badiou’s Platonism is to reject ‘*historicism*, which is to say, the temporalization of the concept’.<sup>4</sup> Against this, he maintains that mathematical forms are real, universal and eternal. This pits Platonism against Hegelianism. Although Badiou respects Hegel’s shrewd reading of Euler’s mathematics,<sup>5</sup> he is a major philosophical opponent insofar as he is ‘the thinker of the abasement of mathematics.’<sup>6</sup> Since, for Badiou, mathematics is indispensable to philosophy, anyone who is indifferent to it is guilty of ignorance pure and simple and therefore has no right to call themselves ‘a philosopher, even with the epithet “new” attached to the word.’<sup>7</sup>

While the meditations on set theory played a supporting role in the fraught approximation of subject’s being in *Theory of the Subject*, the total outsourcing of ontology to mathematics in *Being and Event* effectively amounts to a break with the Sartrean dialectic of the in-itself and for-itself. This bold move undercuts the problem of the inevitable passivization of the for-itself’s authentic activity because the pure nothingness of the mathematical void is the support of being-in-itself and being-for-itself (the subject). Above all, this philosophical orientation is characterized by the rejection of the category of object. As we saw in chapter 2, the decision to substitute mathematical set for object was central to Badiou’s ultra-Althusserianism. *Being and*

<sup>1</sup> Badiou, Alain, ‘On a Finally Objectless Subject’ [1998], trans. by Bruce Fink, in *Who Comes After the Subject?*, ed. by Eduardo Cadava, Peter Connor and Jean-Luc Nancy (London: Routledge, 1991), p. 24.

<sup>2</sup> Wahl, François, *Le Perçu* (Paris: Fayard, 2007), p. 263, my trans.

<sup>3</sup> Badiou, Alain, ‘Philosophy and Mathematics: Infinity and the End of Romanticism’ [1992], trans. by Ray Brassier and Alberto Toscano, in *Theoretical Writings*, p. 29.

<sup>4</sup> Ibid., p. 25.

<sup>5</sup> Badiou, Alain, *In Praise of Mathematics*, trans. by Susan Spitzer (Cambridge: Polity, 2016), p. 32.

<sup>6</sup> Badiou, ‘Philosophy and Mathematics’, p. 29.

<sup>7</sup> Badiou, *In Praise of Mathematics*, p. 32.

*Event* is properly anti-object because the category of set is no longer the substitute for object but the ground of an intrinsic ontology without objects: ‘being is not an object, and nor does it generate objects.’ (BE 8) ‘That mathematics thinks means in particular that the distinction between a knowing subject and a known object is devoid of pertinence.’<sup>8</sup> As we will see in the next section, Badiou makes a considerable revision to this position in *Logics of Worlds* where worlds—and therefore objects—are intelligible in their ‘ontological constitution’ (LW 293). In the later volume, he develops an alternative to what in *Being and Event* he calls Aristotle’s imaginary ‘mathematical architecture of being’ in which ‘the fantasy of the World’ merely generates ‘perishable images’ (BE 8). As we will see, the downgrading of logical totality from World to worlds will enable Badiou to incorporate objects into his Platonism.

This will also once again raise the question of the *angoisse* of Badiou’s subject. However, by itself, the ontology of *Being and Event* is not anguished because mathematics is ‘the sole discourse which “knows” absolutely what it is talking about’ (BE 8). Specifically, ‘it is the closure of all access to the being-in-itself which founds the (human, all too human) universality of mathematics.’ (BE 7) Anguish is avoided insofar as the subject turns its back on the in-itself as positive exterior and settles for the negative in-itself of pure mathematical thought, which from Plato to Kant he takes to be ‘paradigmatic’ regarding the question of being (BE 7).

The ontology of *Being and Event* rests on what Badiou calls ‘an axiomatic decision; that of the non-being of the one.’ (BE 31) This is the anti-theological and anti-epistemological postulate that what *is* is nothing other than multiplicity itself, and that the thought of pure multiplicity is completely subtracted from the realm of objects. Badiou has arguably pushed this view to its extreme by asserting what I will call his postulate of set-theory ontology: that pure multiplicity is most rigorously thought by set theory, whose nine axioms ‘concentrate the greatest effort of thought ever accomplished to this day by humanity.’ (BE 499) The originality of this concerns the potential of set theory to serve as a properly intrinsic ontology: sets are intelligible without external reference; the limits to our knowledge of the universe of sets are constraints internal to set theory itself.

One aspect of this that I will look at in more detail below is the retroactive intelligibility of the mathematical idea. Badiou argues that the origin of mathematical

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<sup>8</sup> Badiou, ‘Platonism and Mathematical Ontology’ [1998], trans. by Ray Brassier and Alberto Toscano, in *Theoretical Writings*, p. 56.



ontology is the crossroads in Western philosophy that emerged with the ancient Greek ‘interpretation of being as  $\text{ἰδέα}$ ’ (BE 125). Against Heidegger, he affirms that, from this point onwards, it was possible to think the subtraction of being from appearances, to think its consistency in terms of ‘the cut-out of the idea, and particularly, from Plato to Galileo—and Cantor—the mathematical idea.’ (BE 125) In other words, after Cantor it is finally possible to retroactively make intelligible the event in ancient Greek thought by affirming that the mathematical idea is absolutely separable from appearances. This move certainly disqualifies historicization as the effect of something extrinsic upon the concept, as in the historicization of spirit by objective history in Hegel’s dialectic. Although the concept of set is impossible to define, it underlies every possible extension of the universe of sets; and in this sense, every discovery of a new region of sets is a rebirth of the same concept.

Although Badiou’s Platonism reinstates mathematics as the principal condition of philosophy, it is irreducible to his early structuralism because the ontological apparatus can never account for everything. Although Badiou’s mathematical ontology arguably exemplifies the ideal and atemporal character of pure thought, it is nevertheless a space in which, and under exceptional circumstances, novelty occurs and a subject comes into being. *Being and Event* presents an ontology with a subject but without object: an event (non-being) is an infinite truth whose finite consequences are borne out by the subject in a procedure of fidelity. This theory is anti-dialectical because it views any entangling of the subject with the objective movement of history as irredeemably compromised. In *The Century* (2003) Badiou clarified his statement that, in this way, ‘Marxism ended up dying’ (BE 334) by specifying that the political failure of the twentieth century was its failure to realize ‘the Promethean project of a possible congruence between thought and History.’<sup>9</sup> The lesson of the twentieth century, he concludes, is that the heroism of ‘historicist voluntarism’ ‘finds its (political) resolution in the necessity of terror.’<sup>10</sup>

In *Being and Event*, politics is a truth procedure. In this orientation, the essence of politics is less antagonism than the subtraction of political truths from any form of state power. Like all truths, the discernibility of a political truth is a subtraction from what Badiou calls ‘the one-effect’ of the ‘*state of the situation*’, in which truths are indiscernible (BE 95) In politics, this boils down to ‘the indiscernibility of the political

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<sup>9</sup> Badiou, *The Century*, p. 15.

<sup>10</sup> *Ibid.*, p. 16.

will', which is joined 'not to legitimacy but to truth' (BE 353), and therefore irreducible to numerical representation. For Badiou, the general will affirms real fraternity—the only form of direct and unqualified equality. This act of genuine community is immeasurably superior to forms of representation, which in one way or another mistake politics for management of the numerical majority. Furthermore, anyone can participate in politics since, no matter who they are and whatever place they hold in a situation, when an event occurs, everyone in that situation is free to affirm its truth. Although the canonical examples of political events since the late-eighteenth century are revolutionary ones that aimed to dissolve the state—Jacobin, Communard, Bolshevik, Maoist—in what Badiou presumed to be the post-revolutionary age of the late-1980s, the aim of politics is fraternity with people who are invisible in the representations of the state with a view to forcing the state to be more inclusive.

The role of mathematics in this conception of politics concerns the existence—demonstrable since Cohen's work on generic multiplicities in 1963—of 'an ontological concept of the indiscernible multiple' (BE 355). This is crucial because a political activist is 'a patient watchman' not an antagonist 'beneath the walls of the State' (BE 111), and this patience is rooted in the belief that ultimately something will happen, which in turn is based on the ontological truth that the concept of the indiscernible exists.

The contentious point, however, is the status of this mathematical concept in the realm of politics. This goes back to the double status of mathematics in *Being and Event*—it is both ontology and truth procedure. As truth procedure, mathematics has produced the concept of the indiscernible within the ontological framework. Via philosophy (which seizes truths and makes them universally available), this truth is made available to politics as the paradigm of indiscernibility. In other words, the philosophical appropriation of the ontological concept of the indiscernible propagates belief that the indiscernible of any realm can be discerned.

It is important to avoid the misunderstanding that this constitutes the application of a mathematical truth in another realm. At root, this concerns the uncompromisingly intrinsic nature of Badiou's ontology, for which the distinction between potentiality and actuality is redundant. This is his argument in *Deleuze: The Clamour of Being* (1997): 'I uphold that the forms of the multiple are, just like the ideas, always actual and that the

virtual does not exist.’<sup>11</sup> In a text written the following year, Badiou spelled out the salient point: ‘In each and every case, set-theory demonstrates its indisputable derivation from Platonic genius by thinking virtuality as actuality: there is only one kind of being, the idea (or in this instance, the set). Thus, there is no actualization, because every actualization presupposes the existence of more than one register of existence (at least two: potentiality and act).’<sup>12</sup> Two points follow from this: events are opportunities to affirm radical difference, and a truth is either empirical or purely abstract at the point of conception. The second point clearly blocks any extension of a formal truth into the empirical domain.

Badiou’s ontology is indifferent to the empirical dimension of truths, as he specified in ‘On Subtraction’ (1991): “‘mathematics’ is the name of ontology as a language situation.”<sup>13</sup> However, this does not mean that other realms have no empirical dimension, only that analysis of their ontology abstracts from this aspect. In meditation nine of *Being and Event*, Badiou provides an ‘empirical argument’ to support his thesis that the metastructure of any situation whatsoever is the power set of its pure multiplicity. Bosteels claims that this effectively puts mathematics and politics ‘in a relation of metaphorical cross-referencing amongst themselves.’<sup>14</sup> However, at this preliminary stage of his exposition, Badiou is instead trying to show that, given the empirical existence of social inequality and that the state treats people in terms of classes rather than a collective, it is pertinent to infer: ‘The interpretation [...] that the State solely exercises its domination according to a law destined to form-one out of the parts of a situation’ (BE 105)

To properly understand the conditioning of politics by mathematical truth we first need to consider the role of philosophy. According to Badiou, after Cantor, philosophy finally ‘frees itself’ from ontological ‘responsibility’ with the designation ‘mathematics = ontology’,<sup>15</sup> because set theory ‘*formalizes* any situation whatsoever’ (BE 130). This, in Badiou’s estimation, finally allows philosophy to concentrate on what is properly philosophical: ‘*the* unity of thought’ which is ‘the unique time of

<sup>11</sup> Badiou, Alain, *Deleuze: The Clamor of Being*, trans. by Louise Burchill (Minneapolis and London: University of Minnesota Press, 2000), p. 46.

<sup>12</sup> Badiou, ‘Platonism and Mathematical Ontology’, p. 59.

<sup>13</sup> Badiou, Alain, ‘On Subtraction’ [1991], trans. by Ray Brassier and Alberto Toscano, in *Theoretical Writings*, p. 112.

<sup>14</sup> Bosteels, *Badiou and Politics*, p. 37.

<sup>15</sup> Badiou, ‘The Event as Trans-Being’ [2004], trans. by Ray Brassier and Alberto Toscano, in *Theoretical Writings*, p. 99.

thought, namely what Plato called “the always of time”, or eternity’<sup>16</sup> Like the pamphlets then, the supposition is that history comes to an end once its underlying condition is fulfilled—in the case of Badiou’s ontology, the assumption is that philosophy’s relation to historical being lasts as long as there is no discourse that can think being directly. The difference is that this is no longer presumed to coincide with the actualization of objective social equality.

Of course, Badiou’s ontology is intended to reassure us that the future of communism is not contingent upon the historical existence of collective forms of social organization and that we will never be without the empty philosophical category of eternity which not only anticipates the future being of truths but provides a space in which they can be registered. This notion of ‘*philosophia perennis*’ is clarified in ‘Qu’est-ce que Louis Althusser entend par “philosophie”?’ (1993).<sup>17</sup> The tangle Badiou straightens out in this text is this: ‘To use Althusser’s terminology, we can say that, when it is sutured to politics, philosophy in fact finds a new object (or objects), even though he explains elsewhere, and very firmly, that philosophy has no object.’<sup>18</sup> Badiou’s intervention is to maximally clarify the distinction of philosophy from the discourses that condition it rather than follow Althusser’s strategy of displacing its vague intersection with them. The result is that philosophy can be nothing but pure theory. Furthermore, ‘politicism offers no escape from theoreticism, and nor, as it happens, does aesthetics or the ethics of the other.’<sup>19</sup> ‘The politics of emancipation is in reality the site of a thought through and through. It is pointless to see in it a divide between a practical side and a theoretical side.’<sup>20</sup> In my view, this is particularly unhelpful today, since what the oppressed lack is not slogans but the means to change the situation. On the reality of political statements, Badiou has even asserted: ‘Plato did not hesitate to maintain that, in any case, its practical execution, *praxis*, bears less truth within it than the statement, *lexis*.’<sup>21</sup> On this point in particular, I think Badiou has strayed too far from the pragmatic Maoism of the pamphlets where practical results are

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<sup>16</sup> Badiou, ‘The (Re)turn of Philosophy *Itself*’ [1989], trans. by Steven Corcoran, in *Conditions*, p. 11.

<sup>17</sup> Reissued and translated as the chapter ‘Louis Althusser’, in Badiou, Alain, *Pocket Pantheon*, trans. by David Macey (London: Verso, 2009), pp. 54–89.

<sup>18</sup> *Ibid.*, p. 83–4.

<sup>19</sup> *Ibid.*, p. 86.

<sup>20</sup> *Ibid.*, p. 85.

<sup>21</sup> Badiou, ‘Philosophy and Politics’ [1992], trans. by Steven Corcoran, in *Conditions*, pp. 151–2.

what matter, even though Badiou is no doubt right that, in their practical application, statements will turn out to be true for only a limited time.

Badiou's position is inconsistent regarding philosophical truth. To serve as an empty space in which it can 'seize' truths, Badiou must make sure that 'the philosophical category of truth is empty'<sup>22</sup> This is clear in *Being and Event*: 'philosophy does not generate any truths'; it is 'at the service of truths' (BE 340, 341). The problem is that, as Wahl has pointed out, 'philosophy is already operative within the truth procedures that condition it.'<sup>23</sup> Ontologically, 'philosophy's role consists in informing mathematics of its own speculative grandeur.'<sup>24</sup> Clearly, ontological concepts 'acquire a metamathematical or metaontological status' in philosophy,<sup>25</sup> but their inscription there is contingent upon the prior assertion of the statement 'mathematics = ontology' in that 'empty' space. This is not the only truth that Badiou's philosophy produces. In fact, the argument of *Being and Event* is organized around philosophical truths, such as the following:

The event is not actually internal to the analytic of the multiple (BE 201)

A truth is always that which makes a hole in knowledge (BE 327)

A subject is what deals with the generic indiscernibility of a truth, which it accomplishes amidst discernible finitude, by a nomination whose referent is suspended from the future anterior of a condition. (BE 399)

Without such statements, we would know nothing about truth procedures in general. These statements can only be made by philosophy insofar as they are the norms by which it can declare itself to be '*the* unity of thought'.<sup>26</sup> 'The Truth'<sup>27</sup> of philosophy contains more than Badiou admits.

If philosophical 'Truth' were empty there would be no possibility of philosophical acts. Yet Badiou remains committed to this possibility. 'The essence of a singular politics lies in the pathway [*trace*] of its procedure, and whether it does in fact comprise a *truth* procedure is sayable only in the philosophical act, which for politics

<sup>22</sup> Badiou, 'The (Re)turn of Philosophy *Itself*', p. 11.

<sup>23</sup> Wahl, Francois. 'The Subtractive: Preface by François Wahl', trans. by Steven Corcoran, in *Conditions*, p. xxxvi.

<sup>24</sup> Badiou, 'Mathematics and Philosophy: The Grand Style and the Little Style', trans. by Ray Brassier and Alberto Toscano, in *Theoretical Writings*, p. 11.

<sup>25</sup> Bosteels, *Badiou and Politics*, p. 34.

<sup>26</sup> Badiou, 'The (Re)turn of Philosophy *Itself*', p. 11.

<sup>27</sup> *Ibid.*, p. 11.

itself, only ever constitutes a sort of inactive recognition.’<sup>28</sup> However, since philosophy has decided metaontological norms, the philosophical act is inherently polemical.

Philosophy is not merely a passive bystander, it

provides an “indirect service” to generic procedures in general and to politics in particular. In stating the “there is” of truths, philosophy establishes a thinking that *turns* people’s minds towards their existence, and shows the conditions on the basis of which thought can be contemporary to its time *without reneging on eternity*. Philosophy is in no way a politics, but it is a form of *propaganda for politics*, inasmuch as it designates its effectiveness as the non-temporal value of that time.<sup>29</sup>

In my view, the potential for Badiou’s philosophy to precipitate the formation of a subject effect in one of the truth procedures is unduly limited by his almost total aversion to sutures. Granted, philosophy cannot cause a truth to emerge, however, once one does take place, the clock is firmly ticking and the situation is itself regrouping to make fidelity to the event more difficult. In this case, what is needed, as the Althusser of ‘Contradiction and Overdetermination’ grasped, is a philosophy that can seize the moment on the basis of knowledge supposed to be certain and take responsibility that this will inevitably turn out to have involved an element of misrecognition. In other words, to make an informed but anguished choice.

The second, and by no means insignificant role of philosophy in politics is that it makes the poem available to the activist to name the presence of the event. In this regard, a distinctive feature of Badiou’s Platonism is its readmission of the poem. In *Being and Event*, Badiou proposes ‘not an overturning but *another* disposition’ of what he calls the ‘poetic-natural orientation’ and the ‘mathematico-ideal orientation’ (BE 125). According to Badiou, poetry retains an important role insofar as it can figure what is properly indiscernible to the nature of a situation as it is. The Mallarméan poem is paradigmatic of this post-Platonic vocation, especially *Un coup de dés*, which exemplifies the figurative *disappearance* of the event: ‘the only representable figure of the concept of event is the staging of its undecideability.’ (BE 194) As such the essence of the event remains elusive, but poetry has the distinct virtue of being able to anticipate the eventual restructuring of the situation. From the point of view of a situation’s (poetic) undecideability, the resolution to think the event rests on an unreal condition of what Badiou calls the ‘abstract term’ of *Un coup de dés*: its ‘mysterious “If”’ that is

<sup>28</sup> Badiou, ‘Philosophy and Politics’, p. 154.

<sup>29</sup> Ibid., p. 305, n. 9.

resolved by the statement ‘If... it was a number, it would be chance [*ce serait le hasard*].’ (BE 195) In short, this is enough to posit that the possibility of thinking the essence of an event by tracing its consequences will have retroactive form. If it were thought ‘the event would be within the situation, it would have been presented [*il aurait été présenté*].’ (BE 195)

In my view, this post-Platonic poetic orientation is symptomatic of a broader problem with Badiou’s theory of the event. At the metaontological level, Badiou’s radical subtraction of ontology from theology only results in a theory of the event that is the simple negative of divine will. As the purely effervescent interruption of chance, it is not immediately obvious what distinguishes the event from the divine will of what Lacan called ‘a character who lies’?<sup>30</sup> Badiou sticks close to Lacan on this point. For Lacan: ‘The notion that the real, as difficult as it may be to penetrate, is unable to play tricks on us and will not take us in on purpose, is [...] essential to the constitution of the world of science.’<sup>31</sup> With Descartes and Einstein, this boils down to believing in the authority of a ‘non-deceptive god’, thereby ‘locating the guarantee of reality in the heavens, however one represents them to oneself.’<sup>32</sup> Although Badiou does not present it in these terms, he reassures us that the event is not deceptive by attributing an identity to it. Even though we can never predict an event in a particular situation, the metaontological form of the event is philosophically discernible under the condition of poetry. As the inscription of non-being, the mark of the event exceeds set-theoretical formalization, it can only be inscribed in form of the Lacanian ‘matheme’. ‘The event will be written  $e_x$  (to be read “event of the site  $X$ ”).’ (BE 179) This inscription serves as the unity to events: one general form for all. From within a situation, of course, the event is ‘an element we had not reckoned with’,<sup>33</sup> however, its metaontological matheme is Badiou’s way of stabilizing its errancy. Like Aristotle’s faith in the regularity of the celestial spheres, the matheme of the event represents the conviction that beyond everything we know there is a permanent and absolutely non-deceptive character.

I think this compels us to draw a different conclusion than Bosteels’ regarding the ‘art’ of politics. Bosteels reads Badiou’s theory of anticipation from *Theory of the*

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<sup>30</sup> Lacan, Jacques, *The Psychoses*, trans. by Russell Grigg and ed. by Jacques-Alain Miller, The Seminar of Jacques Lacan: Book III, 1955–1956 (New York: Norton, 1997) [1981], p. 65.

<sup>31</sup> Ibid., p. 64.

<sup>32</sup> Ibid., p. 66.

<sup>33</sup> Ibid., p. 65.

*Subject* through *Being and Event* as an allegory for politics as the art of the impossible in which hurried interventions are never guaranteed by objective history.<sup>34</sup> Bosteels suggests that the relation *between* the four truth procedures and philosophy needs to be clarified as one of active co-conditioning even though this is nowhere to be found in either *Being and Event* or *Logics of Worlds*.<sup>35</sup> Although Bosteels thinks this would be an extension of Badiou's philosophy I think it would effectively be a break with it since this would dissolve Badiou's key distinction between naming and fidelity. As Badiou put it in 'Philosophy and Poetry from the Vantage Point of the Unnameable' (1993), 'a truth is the *work upon* the being of a vanished event' and philosophy recognizes that the 'nomination of the presence' of which 'is essentially poetic'; equally, philosophy recognizes 'that all fidelity to the event [...] must have the rigour of which mathematics is the paradigm'.<sup>36</sup> Likewise, in *Being and Event*, poetry figures the presence of an event's disappearance and is distinct from the (mathematical) rigour or technical 'art' of its consequences. This distinction must be maintained at all costs to prevent the disaster of submerging thought in one truth procedure. Badiou's philosophy—that of *Being and Event* at least—must insist on 'two unnameables', the poetic 'advent' of the unnameable and its mathematical 'veridiction'.<sup>37</sup> 'Plato banned the poem because he suspected that poetic thought could not be the thought of thought. We once again welcome the poem in our midst, because it keeps us from supposing that the singularity of a thought can be replaced by the thought of this thought.'<sup>38</sup> This distinguishes the poetic tracing of the disappearance of the event from the mathematical anticipation and retroaction of its being.

For Bosteels by contrast, the unnameable places an unwelcome constraint on thought because it bars the discourse which articulates the co-conditioning of the truth procedures from being 'a philosophy of recognition and pure negativity'.<sup>39</sup> Consequently, Bosteels welcomes Badiou's announcement in July 2002, shortly before the publication of *Logics of Worlds*, that: 'We are no longer in the logic of *names*, but in

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<sup>34</sup> Bosteels, *Badiou and Politics*, p. 237.

<sup>35</sup> *Ibid.*, p. 364, n. 77.

<sup>36</sup> Badiou, 'Philosophy and Poetry from the Vantage Point of the Unnameable' [1993], trans. by Bruno Bosteels, in *The Age of Poets*, p. 57–58.

<sup>37</sup> *Ibid.*, pp. 58, 57.

<sup>38</sup> *Ibid.*, p. 58.

<sup>39</sup> Bosteels, *Badiou and Politics*, p. 196.



a logic of *consequence*.<sup>40</sup> However, what Bosteels does not recognize is that the theory of appearance in *Logics of Worlds* is no less intrinsically mathematical than the ontology of *Being and Event*, and that it is therefore a mathematical alternative to the poetic nomination of an event's presence in *Being and Event*. Ultimately, Bosteels' complaint is that mathematics is the privileged discourse of Badiou's philosophy: 'we are clearly embarking on an understanding of the event in general, for example in politics, which would not have to be the slave to mathematics.'<sup>41</sup> In my view, *Logics of Worlds* is even further from Bosteels' ideal than *Being and Event*. As we will see in the next section, the question of mathematical submersion returns once Badiou adds a mathematical theory of appearance.

In the remainder of this section I will specify the 'afterwardsness' of the concept of the indiscernible in *Being and Event*.

Although, strictly speaking the event *is not*, it nevertheless 'belongs to the conceptual construction, in the double sense that it can only be *thought* by anticipating its abstract form, and it can only be *revealed* in the retroaction of an interventional practice which is itself entirely thought through.' (BE 178) The difficulty is the clarification of the conceptual bridge across which a to and fro movement effectively pinpoints the occurrence of an event. This is also a translation of the problem of historicization since it concerns the birth of a new situation out of an old one. There is a polemical dimension to Badiou's Platonism, especially regarding history as philosophy's outside, and this something that A.J. Bartlett's *Badiou and Plato* (2011) fails to recognize. Although Bartlett mentions the logic of future anterior in his discussion of the event, he does not explain how this serves as an alternative to the historicization of the concept.<sup>42</sup> Ontologically, this is the problem of how to construct 'an *exceptional* multiplicity'.<sup>43</sup> Badiou does specify that '*for* there to be an event, there must be the local determination of a site' (BE 179), that is, a place within the existing situation where an event can occur, where 'the historicity of the situation is concentrated.' (BE 179) Although this acknowledges the role of historicity, it is that of a very weak determination: 'The site is only ever a *condition of being* for the event.'

<sup>40</sup> Badiou, Alain, 'Beyond Formalisation: An Interview' [Interview with Peter Hallward and Bruno Bosteels], trans. by Alberto Toscano, *Angelaki*, 8.2 (2003), 115–136 (p. 133).

<sup>41</sup> Bosteels, *Badiou and Politics*, p. 362, n. 68.

<sup>42</sup> Bartlett, *Badiou and Plato*, p. 98.

<sup>43</sup> Hallward, *Badiou: Subject to Truth*, p. 59.

(BE 179) In *Being and Event*, the temporality of the event is only really determined in the future anterior. ‘Strictly speaking, a site is only “evental” insofar as it is retroactively qualified as such by the occurrence of an event. However, we do know one of its ontological characteristics, related to the form of presentation: it is always an abnormal multiple, on the edge of the void.’ (BE 179) To inhabit an evental site means to be ‘where there is almost nothing’.<sup>44</sup> This has been a constant theme of Badiou’s thought from his earliest work: we recall that *Almagestes* was an opportune intervention in the literary ‘desert’ of the new novel. In the ontology of *Being and Event*, to be on the edge of the void means to be at the point within a structured situation that is as empty as possible, in effect, one that is minimally structured by the classificatory determinations of that situation. It is therefore not surprising that Badiou’s conception of site in *Being and Event* is itself extremely vague; its retroactive qualification by an event is what counts. The question of the ontological determination of a site turns out to be the problem of the discernibility of what might occur there; a problem for which Badiou has a solution: ‘there exists an ontological concept of the indiscernible multiple’, specifically Cohen’s technique of forcing.

Cohen forcing is retroactive because it demonstrates that a generic extension belongs to a discernible region of sets without deducing this from the language of the known region. A generic extension is indiscernible in the sense that it is composed of parts which avoid (rather than destroy) the criteria of inclusion in the set it extends. A generic set is constructed by means of what mathematicians call a ‘filter’: a device which selects only those parts which contain elements that are classifiable according to existing criteria of discernibility and elements that are not. By way of illustration, we could say that the generic extension to the set of colours red, orange, yellow, green, blue, indigo and violet, is composed of the indiscernible parts of the rainbow where colour blurs, where the concept of colour is subtracted from the distinction of hues. In essence, a generic extension is linked to the set it extends by implication: ‘if  $S$  is denumerable transitive model of set theory, then so is a generic extension  $S(\mathbb{Q})$ ’.<sup>45</sup> (BE 416) The problem is that, on the basis of the discernibility of a given model it is not possible to deduce its generic part. The proposition *a model implies a generic extension* is only true from the standpoint of the extension.

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<sup>44</sup> Badiou, *The Century*, p. 57.

<sup>45</sup> It is standard to symbolize the generic with the letter  $G$ , however, consistent with his idiosyncratically Lacanian approach to set theory, Badiou uses  $\mathbb{Q}$ .

Restated in terms of existence, we can say that  $\varnothing$  does not exist in  $S$  but it does exist in  $S(\varnothing)$ ; or even better, the temporality of the generic is ‘the future anterior of the existence of an indiscernible’ (BE 400). This means that the concept that will retroactively clarify the implication is ‘*intrinsic* indiscernibility; that is, a multiple which is effectively presented in a situation, but radically subtracted from the language of that situation.’ (BE 386) Since, in itself,  $S$  is a ‘denumerable transitive model’, it only provides the means to suppose the existence of a part that is *extrinsically* indiscernible—one that may be a denumerable transitive model of set theory, but one that nevertheless has nothing in common with  $S$ . By contrast, the whole point of Badiou’s interpretation of Cohen forcing is that  $S(\varnothing)$  turns out to have a subject language that is partly related to  $S$ , one ‘which is internal to the situation, but whose referent-multiples are *subject to the condition* of an as yet incomplete generic part.’ (BE 398) In mathematics, the process of constructing the subject language always begins with a leap of faith: with the supposition that it is possible to speak about the generic by suspending the classificatory power of the properties of  $S$  and nominating sets for investigation as to their inclusion in the generic. In my example of a generic rainbow, what Badiou calls ‘tinkering with names’ (BE 383) would amount to the invention of names for colours that are not discernible as hues. Of course, in set theory, the kind of forcing Badiou is interested in only takes place at the extreme outer limits of knowledge and deals with sets whose genericity is strictly unpredictable in advance of investigation into their content. The essential point is that it is possible for the subject to undertake ‘enquiries’ [*enquêtes*] whose ‘meaning’ is ‘in the future anterior’ (BE 400), enquiries which ‘are incalculable’ but nevertheless ‘ruled’ insofar as they are ‘an infinite series of aleatory encounters’ between the subject and the generic part, of which it ‘is *itself* a finite configuration’ (BE 399). The decisive point is that the condition of the generic is constructible in terms of what already exists in  $S$ , but the sets which satisfy this condition do not. Therefore, the subject can evaluate sets that it encounters on the edge of discernibility in terms of ‘fidelity’ to the truth of the supposed condition. The discovery of even some sets which verify the truth of the condition will be sufficient to say that the generic extension exists, even if it may still remain largely indiscernible. At this point, ‘an undecidable statement of ontology’—the existence of the generic extension—‘is veridical therein, thus decided.’ (BE 428)

Badiou gives a few examples of this in the truth procedures. In astronomy, poetry and music Badiou provides illustrations of things that have taken place, however, as in *Theory of the Subject*, the ‘post-Marxist-Leninist political procedure’ remains

‘suspended’ upon the possibility of a future encounter. He specifies the condition: ‘the occurrence of that indiscernible of the situation which is politics in a non-parliamentary and non-Stalinian mode.’ (BE 405) However, since his account of retroactive implication is coupled to an ontology that affirms the world as it is, this mode of politics remains merely a hypothesis for us today. As we will see in the final section of this chapter, although they qualify as events, recent historical riots do not clarify how this mode can exist beyond the anxious phenomena of rioting. Finally, we can also say that retroactive implication is distinct from the classical negation of the pamphlets: ‘In forcing, the concept of negation has something modal about it: it is possible to deny once one is not constrained to affirm. This modality of the negative is characteristic of subjective or post-evental negation.’ (BE 415)

In Badiou’s Platonism, retroactive implication is the form of universal thought. Badiou is fond of citing Plato’s apologia in the *Meno*: the ‘irrefutable’ demonstration that even the ‘slave’ has the innate capacity to think because implicative structure is universal.<sup>46</sup> Accordingly, everybody has the innate capacity to prove a truth without recourse to myth or religious narrative, and Greek philosophy could constitute itself democratically by drawing on the formal support of ‘totally independent norms, explicit norms, which everyone could know.’<sup>47</sup> In short, Badiou’s claim that everyone has the potential to think (rather than merely exist) turns out to be based on his claim that implicative structure is a general faculty of the subject. This is distilled in Thesis 5 of Badiou’s ‘Eight Theses on the Universal’ (2000): ‘The Universal has Implicative Structure’.<sup>48</sup> Given that ‘Thought is the Proper Medium of the Universal’ (Thesis 1) and ‘Every Universal Originates in an Event’ (Thesis 3), the universal is therefore an event in thought. A corollary of Thesis 5, which Badiou does not draw, is that, insofar as an event can be thought, its consistency is *logical* since implication is a basic logical form. Likewise, in *Being and Event*, the universality of thought has logical structure, since although forcing affirms the unbounded randomness of pure mathematical multiplicity, it is nevertheless a logical tool which can make the generic set intelligible by retroactively constructing the implicative structure which links it to an existing region of sets.

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<sup>46</sup> Badiou, ‘Eight Theses on the Universal’ [2000], trans. by Ray Brassier and Alberto Toscano, in *Theoretical Writings*, p. 151.

<sup>47</sup> Badiou, *In Praise of Mathematics*, p. 22.

<sup>48</sup> Badiou, ‘Eight Theses on the Universal’, p. 150.

This might seem like a surprising twist, given Badiou's criticism of implication in *Theory of the Subject*. However, we should remember that Badiou only affirms the universality of retroactive implication in *Being and Event*: a subject deduces the truth of an event, and implicative structure retroactively induced from the existence of a truth. What Badiou does not say, but what must nevertheless be clarified, is that the universality of the structure of implication in truth procedures is a restricted use of it. This is not a trivial point because the fiction of an all-powerful deduction characterizes what Badiou calls 'disaster', one of the three types of 'evil'. In essence, this is the illusion that the 'subject-language' of a truth procedure has 'the power to name all the elements of the situation.'<sup>49</sup> In its 'good' use, implication admits the unnameable point of each truth procedure, such as 'the community and the collective' in politics. Therefore, it would seem necessary to have an ethics of the use of implication to safeguard against its use to absolutize the power of a truth. However, as we will see in the next section, when Badiou adds his theory of the object he does not properly address the possibility that the matter becomes much more complicated. In a nutshell, the problem arises because in more powerful applications of the mathematics he uses for his theory of appearance it is theoretically possible to force a generic extension without an explicit ontological subject.

#### THE OBJECT

*Logics of Worlds: Being and Event*, 2 supplements Badiou's set theory ontology with a 'phenomenological' argument for the objective appearance of beings in 'worlds'. With characteristic mathematical virtuosity, Badiou shows that, at the 'transcendental' level of category theory, circumscribed domains of pure multiplicity appear objectively under logics. *Logics of Worlds* is principally concerned with explaining how a world is manifested without retracting the ontological claim of *Being and Event*. It is guided by the question of how pure multiplicity 'comes to consist as being-there' such that, at the level of appearance, there are relatively stable worlds rather than chaos (LW 101). The key concept is a distinctively non-Kantian type of 'transcendental organization', whose objectivity 'is altogether anterior to every subjective constitution, for it is an immanent given of any situation whatsoever.' (LW 101)

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<sup>49</sup> Badiou, Alain, *Ethics: An Essay on the Understanding of Evil*, trans. by Peter Hallward (London: Verso, 2002), p. 85.

Two years after the publication of *Being and Event*, Jean Desanti's 'Some Remarks on the Intrinsic Ontology of Alain Badiou' first appeared in May 1990.<sup>50</sup> Desanti's objections are largely what stimulated Badiou to write a second volume. The problem with Badiou's ZFC set-theoretical ontology, Desanti argues, is its extremely minimal interpretation of the famous Aristotelian proposal to think being intrinsically (being *qua* being). For Desanti, Badiou's ontological decision wilfully impoverishes thought. This is because, by definition, any extrinsic ontology is primarily concerned with how it can inscribe the being of whatever it excluded at a given level of development; and, since Badiou's intrinsic ontology is univocal, it is extremely limited in what it can say about its principal subject matter: its indiscernible outside (non-being). Quite simply: 'Badiou's intrinsic ontology is too impoverished to accomplish what he expects of it.'<sup>51</sup> By contrast, a maximally intrinsic ontology must eschew Platonism and affirm what Badiou calls Aristotelianism: 'that being is said "in several senses"'.<sup>52</sup> The most obvious way to do this within mathematics would be to take the direct opposite of Badiou's position and prioritize categorial relations over set-theoretical elements. *Logics of Worlds* should be understood first and foremost an attempt to refute this alternative. However, it cannot succeed in this regard for the simple reason that Badiou's ontological prioritization of set theory is a choice, pure and simple.

More specifically, Badiou's account of the object has been found wanting insofar as the correlation he describes between appearance and being lacks an argument. Badiou's 'objective phenomenology' claims that appearances are determined by underlying ontological multiplicities. The key assertion is that objects are composed of 'atoms' which are prescribed by ontological elements. As Hallward has pointed out,<sup>53</sup> Badiou's definition of the object is merely authorized by the pure 'postulate of materialism': '*every atom of appearing is real*' (LW 218). Rejecting this postulate opens up the possibility of a Deleuzian envelopment of Badiou's philosophy since the postulate of materialism also guards against the return of the Deleuzian distinction of the virtual and the actual at the level of appearance: it 'stipulates that the virtuality of an

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<sup>50</sup> Desanti, Jean, 'Some Remarks on the Intrinsic Ontology of Alain Badiou', in *Think Again*, ed. by Peter Hallward, pp. 59–66.

<sup>51</sup> *Ibid.*, p. 66.

<sup>52</sup> Badiou, Alain, *Mathematics of the Transcendental*, trans. by A.J. Bartlett and Alex Ling (London: Bloomsbury, 2014), p. 14

<sup>53</sup> Hallward, Peter, 'Order and Event: On Badiou's *Logics of Worlds*', *New Left Review*, 53 (September–October 2008), 97–122 (p. 113).

apparent's appearing in such and such a world is always rooted in its *actual* ontological composition (LW 251). In his book *Deleuze*, Badiou argues that this problematic distinction is based on a paradox at the level of the Deleuzian object. 'To conjure the double spectre of equivocity and the dialectic, Deleuze ends up by posing that the two parts of the object, the virtual and the actual, cannot in fact be thought of as separate. No mark or criterion exists by which to distinguish them.'<sup>54</sup> The 'complete determination of the ground as virtual' therefore 'implies *an essential indetermination of that for which it serves as a ground*.'<sup>55</sup>

In my view, the postulate is related to the more general problem of axiomatic philosophy, however, as such, it is authorized by the general approach of Badiou's philosophy. As we saw earlier in this chapter, the problem of the authority of philosophical prescription frames Badiou's Platonism in general. To enter the texts of *Being and Event* and *Logics of Worlds* we must accept the validity of axiomatic decision making, and it is therefore inconsistent to complain about this at the level of appearance after having accepted it at the ontological level. The whole point of axiomatic thought is that key statements are presumed to be true for the purpose of opening a space in which an argument can retroactively crystallize. Accordingly, Badiou's theory of the object should be assessed as an experiment which puts his postulate of materialism to the test.

Consequently, a more perceptive approach holds Badiou to account on his own terms. François Wahl's shrewd preface to *Conditions* (1992) has lead the way. In relation to politics the question concerns the extent to which this theory of the object can be put to use. If, in the present, it made the existence of a pre-evental world intelligible, then it would move beyond reinterpretation of past situations and stake a claim to having strategic application. In the final section of this chapter I will take this up in relation to Badiou's enthusiasm for the '*réveil*' of history six years ago.

In reality, the concrete examples of political events that flesh out Badiou's formal theory of appearance rely on other accounts of the appearance of the events in question, ones, moreover, that exceed the minimalist determination of appearance in his theory—for example, witnesses, documentation, reportage, historical narratives, fictional dramatizations. Without a doubt, Badiou's theory of the object provides a framework for new interpretations of historical conflicts, but as such, his schemas of

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<sup>54</sup> Badiou, *Deleuze*, p. 53.

<sup>55</sup> *Ibid.*, p. 53.

arrows are never more than empty forms whose meaning is fixed by annotation and interpretation. These accounts are invariably presented from the standpoint of the third person. May '68, the one historical event which Badiou could speak about in the first person, is conspicuously absent from the examples. For instance, his analysis of the Battle of Gaugamela in 331 BCE is based on John Warry's *Warfare in the Classical World*, which Badiou takes to provide a 'clear synthesis' of 'those patchy and undoubtedly approximate, sources which are the Greek historians of the period.' (LW 540) Badiou evidently accepts that, independently of his account of appearance, we already know about this battle, or, for example, about the standoff between Mohawks and Québécois police in 1990 from other sources. The problem, from the standpoint of his formal theory, is that these references contaminate the purity of his theory of appearance. Although he claims that real appearance is ontologically prescribed, a precise account of how the abstract diagrams of the Battle of Gaugamela and the standoff in Quebec are constrained by the ontology of those political situations is lacking and instead they seem to be merely formal interpretations of those situations. In short, the presentation of these diagrams makes an 'empirical argument' for adopting a formal theory of appearance, much like the one made for adopting a formal ontology in meditation nine of *Being and Event*

Wahl is right that Badiou's calculus of appearance 'abstracts and hollows out [évide] to the maximum the given upon which it operates. But at the same time, it is intended to rediscover, if not perception, then at least its conceptuality under the form of objective unity.'<sup>56</sup> In *Briefings on Existence* (1998) Badiou provisionally stated that his theory of the logics of truths would 'retroactively' elaborate 'a new thought of sense'.<sup>57</sup> *Logics of Worlds* delivers this insofar as the transcendental laws 'lend meaning [donnent sens] to the being-there of any multiple.' (LW 451) This is consistent with the subtraction of ontology from presence in *Being and Event*, but defines an alternative to the Heideggerian semantics of 'letting-be of appearing' that retains a subsidiary role (in the guise of the poem) in the first volume (BE 125). In *Being and Event*, the indiscernible set of Cohen forcing is subtracted from the presence effect of the poem and is therefore without sense because: 'At base, its sole property is that of consisting as pure multiple, or being. Subtracted from language, it makes do with its being.' (EE 371)

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<sup>56</sup> Wahl, *Le Perçu*, p. 260, my trans.

<sup>57</sup> Badiou, *Briefings on Existence*, trans. and ed. by Norman Madrasz (Albany: State University of New York Press, 2006) p. 122.



In *Logics of Worlds*, the concept of the transcendental is thinkable on the basis of analysis of the degree of ‘reflexivity’ a multiple possesses, a property which divides the ‘Whole’ of pure multiplicity classically, i.e. without remainder (LW 110), an operation that establishes at once that ‘the Whole has no being’ but that there are nevertheless absolutely reflexive entities within the Whole, each of which defines the maximum degree of appearance or sense in a world. The account of the object in *Logics of Worlds* is supposed to convince us that even though the formalism of *Being and Event* cannot account for the phenomenal existence of beings (or ‘entities’), every multiplicity is present somewhere as a ‘being-there’. However, the problem, as Wahl has clearly stated, is that this massive edifice ultimately serves no purpose other than to confirm the Platonic break with sensuousness and subjective constitution.

it is precisely the attempt to obtain a stand-in [*doublure*] for appearance through that which would be its denial that is the singular interest of Badiou’s device, the way in which he invented a means to *circumvent* in order to rediscover. His agility is up to the task and it is a real intellectual pleasure to follow him on his trial. But apart from this, since the circumvention is a diverting, it fails to find anything other than what he has denied.

Whereby, an operation that can only search for what it has already found but refuses to rest on it, and can only produce from start to finish that ghostly appearance, devoid of all consistency, floating and dreamlike; the exercise of a logic that is gratuitous with respect to its ambition. The mathematical reverses itself twice poetically, from the point of phenomena and of logic.<sup>58</sup>

Ultimately, the apparatus of appearance in *Logics of Worlds* is designed such that although the object is not inherently meaningful, it can be perceived as the locus of sense. This takes things a step further than the materialist epistemology of *Concept of Model*, whose semantics, we recall was based on the substitution of set theoretical material for factual content, thereby displacing the domain of interpretation from empirical objectivity to the eternal sphere of set-theoretical form. Like *Concept of Model*, *Logics of Worlds* presents an account of the immanent production of sense, without the interpretation of objects.

However, the distinguishing twist of the ‘new thought of sense’ in *Logics of Worlds* is that sense is one aspect of logic. Badiou anticipated this in *Briefings on Existence* (1998), in which he specified that, on the one hand ‘logic thinks its own subordination to ontology’, that is, the ‘constraining correlations’ between the universe

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<sup>58</sup> Wahl, *Le Perçu*, p. 264, my trans.

of sets and the possible universe of a world; while, on the other hand, logic is ‘what is localized as such in a possible universe’, specifically ‘various regimens of definitions and classifications’ which expose an order whose meaning is ‘practiced but not thought’ by the ontological framework.<sup>59</sup> In *Logics of Worlds* he clarified that, although the metaphor of the visible is well-suited for understanding this ‘blind spot’<sup>60</sup> of ontology, this metaphor ‘is also entirely deceptive because the laws of appearing are intrinsic and do not presuppose any subject.’ (LW 317)

This notion of objective sense is problematic, especially since the meaning of the formal diagrams in *Logics of Worlds* depends on Badiou’s interpretation of them. He would like them to be understood as expositions of the logical sense intrinsic to the multiple from which they are composed: ‘the real of thought is here entirely contained in the diagrams, abstracting from every interpretation of the arrows.’ (LW 318) However, without following his interpretation, they are purely abstract and it is unclear how, by themselves, they could help us understand the logic of the political situations they claim to be diagrams of. Badiou is yet to clarify precisely what it means to begin analysis of a situation at the level of existence if appearance is defined in purely formal terms. In the ‘Afterword’ to *Think Again* (2004) he said, for example, ‘we must move from an acknowledgement of the appearing of Mars in a world (whose scale, or “transcendental regime” [*le transcendental*], we can establish) to its ontological determination.’<sup>61</sup> However, since the visible is ‘entirely deceptive’ (LW 317), how we see Mars in the sky cannot not serve as a basis for establishing its transcendental. In the formal theory, it is possible to think the categorial appearance of a pure multiple (for example a topology on a multiple X) without making use of sensuous perception; however, as Badiou admits, in this aspect “Mars” simply doesn’t exist at all.<sup>62</sup> The only way to establish that the formal appearance of a multiple does indeed correspond with a perceived object such as Mars without making use of our own senses is to employ scientific instruments of measurement—but an account of the protocols of this is entirely lacking from Badiou’s theory of the object.

The subordination of the object to ontology in Badiou’s account seems to shut out the thing that Wahl wants: an objective phenomenology in which the ‘agency

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<sup>59</sup> Badiou, *Briefings on Existence*, pp. 120–121.

<sup>60</sup> Ibid., p. 120.

<sup>61</sup> Badiou, Alain, ‘Afterword: Some Replies to a Demanding Friend’, trans. by Alberto Toscano, in *Think Again*, ed. by Peter Hallward, p. 233.

<sup>62</sup> Ibid., p. 233.

[instance] *of the object*’ is what ‘makes sense of the sensuous in its pure immanence [*faire-sens du sensible en sa seule immanence*]’.<sup>63</sup> In *Logics of Worlds* Badiou notes that ‘Wahl remains in the generic element of the “linguistic turn”, which demands that perceptual organization be referred back to discursive categories.’ (LW 533) However, the distinction between Wahl and Badiou is not as clear-cut as Badiou would have us believe. Badiou’s objective phenomenology also refers back to the underlying discourse of ontology; his Platonism is ‘not a thesis about the world but about discourse’ insofar as mathematics ‘pronounces what is expressible about being qua being.’ (BE 8) According to Badiou, the difference between his account of the consistency of a world and Wahl’s is that while his adds order to the underlying ontological discourse, Wahl’s draws it from ‘the order of discourse’ (LW 533) However, again, even if being itself is without order, what can be said about it in ontological discourse must already have an order, and it therefore seems more appropriate to say that a world transforms the ontological order rather than donates order to ontology. Like Paul Livingston, I find Badiou’s rhetoric against the linguistic turn ‘misleading’; specifically, Badiou’s declared rejection of ‘any assumption of the total adequacy of language to a universe complete and consistent in itself’ is actually only partial since his ontological discourse preserves formal consistency: ‘the demand that whatever may be said must be said without contradiction.’<sup>64</sup>

The area in which Badiou’s theory of the object has so far been inadequately addressed is the sense in which appearance retroactively modifies ontology. Badiou’s theory of the object ‘contains the demonstration of something like a retroactive effect of appearing on being: the fact that a multiple appears in a world entails an immanent structuration of this multiple as such.’ (LW 94) This aspect is especially worthy of attention because it concerns the usefulness of Badiou’s account of appearance for a structural analysis of political situations. The question is: does the retroaction of appearance merely enhance Badiou’s politics of the event, or does it constitute something more, such as a logic of change? The answer, as I hope to show in the remainder of this section, is that, although Badiou could have made his ‘Greater Logic’ more powerful, it is sufficiently weak to ensure that the event is just as ‘transcendentally discontinuous’ as it is ‘ontologically

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<sup>63</sup> Wahl, *Le Perçu*, p. 260, my trans.

<sup>64</sup> Livingston, *The Politics of Logic*, p. 11.

un-founded' (LW 387). As such, Badiou's 'Greater Logic' and its theory of the object are little more than accessories to his ontology.

First, I will clarify the constraint of ontology on appearance and the retroaction of the object as these are conceived in *Logics of Worlds*.

The constraint of ontology on appearance concerns the totality of a world. The simplest way for us to understand this at the level of the formal theory is to clarify the difference between world and state. In *Logics of Worlds*, a world 'is only a world to the extent that what composes its composition lies within its composition'; and what composes it are 'the parts' of the multiple that 'ontologically underlie that world.' (LW 307–8) Distinct from a state in *Being and Event* (which is a collection of parts or subsets), a world articulates the sense in which a situation includes movement. In other words, while ontology discerns punctual differences, appearance manifests the logical connections—what Badiou calls 'relations'—between coexisting objects in a world, through which it is possible to move between points in a world. It is also useful here to recall the notion of an open topological space that I discussed in chapter 1 since, like an aesthetic work (as Badiou conceived it in the mid-1960s), a world is an immanent totalization of its parts. The difference, at least, in relation to how aesthetic autonomy was figured in *Almagestes*, is that a world does not have an underlying material substrate: 'Neither matter (beneath) nor principle (above), a world absorbs all the multiplicities that can intelligibly said to be internal to it.' (LW 308)

Although state and world articulate the closure of the multiple through the articulation of its parts, they do so in different ways. As the totalizing operation of numerical closure, a state represents the multiple as a number, thereby furnishing it with a 'fictional *being*' (BE 98). By comparison, the "'closing" principle' (LW 313) of a world is its 'logical completeness' (LW 317). This is a different type of knowledge to that of the state. A relation between objects in a world is 'exposed to the extent that there exists at least one point, internal to the world, from which it is known.' (LW 319) The logical completeness of a world is grasped from the single point within that world where it is 'universally exposed': the point 'from which it is known as clearly and distinctly as possible.' (LW 319) However, the point of a world's universal exposure is not its infinity point; 'a world is the unfolding of its own infinity' but it 'cannot internally construct the measure or the concept of the infinite that it is.' (LW 309)

On this basis, we can clarify the difference between the constrained movement of objects within a world in *Logics of Worlds* and the wandering of the subject into the outplace in *Theory of the Subject*. As in *Being and Event*, the event remains the

principle of change in *Logics of Worlds*: ‘an event changes the transcendental arrangement [*dispositive*] of a world. But a relation as such is precisely not an event.’ (LW 311) A relation ‘only elicits the appearance of objective existences that are already there’. (LW 311) Relations map out paths along which it is possible to move within a world, but the network of paths is limited by the non-inclusion of its infinity point. This means that relations can map the movement towards the threshold of world but can neither arrive at nor trespass this horizon. Unlike *Theory of the Subject*, whose wandering topologist can step outside the limits of a known space and see what happens, in *Logics of Worlds*, the closure of a world is opened by the occurrence of an event, and the passage from old world to new is intelligible in terms of the persistence of a ‘body’ rather than as the retroactive intelligibility of a subjective act (stepping into the unknown).

Unlike the retroaction of the generic multiple in *Being and Event*, the retroaction of the object in *Logics of Worlds* is an automatic process. This is because appearance is the exposition of ‘the material form’ (LW 221) of being as being-there, in which ‘there’ is simply the space of logics that are immanent to being but not articulated by ontology. In general, appearance is the retroaction of the ‘feedback-effect’ (LW 221) of a logic that is immanent to any multiple whatsoever. The multiple need not be generic, but the retroaction of appearance applies to generic multiples as well. This means that, from the standpoint of *Logics of Worlds*, the subjective process of discerning a generic multiple that was set out in *Being and Event* automatically gives rise to the retroaction of a mode of appearance peculiar to the generic multiple; the retroaction of appearance is operative regardless of whether an event has taken place or if a subject exists. The key point is that the retroaction of appearance does not add anything to ontology, it simply expresses the logic of what already is.

The obvious question is, if the retroaction of appearance doesn’t add anything to ontology and the event remains the principle of change what is the point of it? Two things stand out: the means to map networks within a world, through which it is possible to move towards its threshold, where events are possible; and, post-event, the capacity for a body of truth to orient itself within a new world, and thereby take control of its own fate. The problem with Badiou’s theory of appearance is that these are conceived as almost entirely abstract possibilities. Furthermore, it remains unclear why the theory of appearance is limited to the analysis of movement within worlds when, at the level of the mathematical formalism which provides the conceptual core of this

theory, resources exist to think the appearance of the generic independently of the subjective process outlined in *Being and Event*.

I will now address these points in more detail, and to do so I will begin with Badiou's account of 'the transcendental functor' at the end of Book III of *Logics of Worlds*.

The transcendental functor is an operator which associates parts of the object to degrees of appearance. In the fictional political demonstration that serves as an example throughout *Logics of Worlds*, the transcendental functor associates parts of the object 'group of postmen' with their degrees of appearance: those orderly members who conscientiously act out the characteristics of the group (marching in unison, chanting slogans, waving banners, wearing uniform and union badge) will appear maximally as members of this group, while those postmen who are there but display the opposite traits (dawdling, murmuring, scuffling, plain-clothed) are practically invisible as members of the group and are therefore parts of this object which have 'a degree of existence on the edge of nothingness.' (LW 278)

This explains why no object is permanent. Every object can disappear because no matter how well-ordered and stable it might seem, it includes, in terms of its own positive characteristics, the part of disorder which can map a return to the pure multiplicity which underlies and constitutes it. In other words, the 'synthetic unity' of an object is constituted in such a way that it can unravel. This boils down to the technical point that because an object is synthesized, or 'enveloped', by one of its parts (the one which serves as the principle of order), '[o]nce the element that played the role of envelope is no longer operative, we witness the alteration of the whole of appearing' (LW 288). This retroactive 'collapse into inconsistency, into the rout of unbound multiplicities' (LW 288) makes it possible for a different element to envelope the whole and constitute a different order.

Badiou's illustration of this point is Alexander's defeat of the numerically superior Persian army at the battle of Gaugamela. In Badiou's graphic interpretation, the envelope of 'the supposedly decisive action' of Darius' two-hundred scythed chariots was no longer operative once Alexander arranged his troops in oblique formation (LW 287). The 'becoming' of the battle world of Gaugamela is the process in which envelopment shifts from the apparently decisive element (Darius' scythed chariots) to what was initially a subordinate element (the formation of Alexander's troops). In this subversion, the retroactive effect of appearance on being is Alexander's plot against Darius' statist logic, which induces mayhem on the battlefield, in the midst of which it

was possible for Alexander to spontaneously seize the initiative and heroically charge through the Persian lines, a decisive action that led to ‘the disappearance of the battle world as such, which is terminated by Alexander’s complete victory.’ (LW 284) This is an example of movement within a world (regimented order to mayhem), the fate of a decision (Darius’ deployment of scythed chariots makes Alexander’s victory possible) and the persistence of a body (Alexander’s army) from one world to another. However, what this example does not clearly illustrate is the occurrence of an event. Although the battle world’s decent into chaos may have been a site in which an event was possible, all we know is that in the end Alexander was victorious, which instead illustrates the displacement of dominance from Darius to Alexander. It remains unclear if there is anything new in the multiple underlying the post-battle world and if something appeared that was previously invisible, even though Badiou tells us that great battles such as this one ‘have the immaterial status—both universal and local—of truths’ (LW 288).

At the level of appearance, real change is the effect of the retroaction of the object upon the multiple after an event. Badiou distinguishes four modalities of ‘change’ that range from mere ‘objectivation’—the ‘modification’ of a multiple in the process of ‘becoming-object’—to the appearance of ‘the strong singularity or event’ in which ‘the existential power of the singularity subverts the regime of the possible. (LW 391, 393) As in *Theory of the Subject*, real change happens when something that was previously defined as ‘inexistent’ is made to exist, thereby forcing a new logic to emerge. However, in *Logics of Worlds* the key move is different. The condition for real change ‘occurs’ [*arrive*] when modification is exhausted, that is, when the identity function of an object is reflexive and an evental site exists (LW 391, trans. modified). At which point, three things are possible: 1. the site will be ‘a measured, or average, appearing’, a ‘fact’ (LW 392); 2. the site will be maximally intense, the absolute appearance of a world under its own measure, a (weak) ‘singularity’; 3. the site ‘raises up’ [*relève*] the proper inexistent of the world, making a new world consist, a (strong) ‘singularity’ or ‘event’ (LW 393, trans. modified).

Although this ramified conceptualisation of the site provides a more nuanced account than *Being and Event* of why an evental site is not always paired with an event, it cannot add a theory of how the event is caused by the movement towards the threshold of a world since that would make the role of the event redundant. What *Logics of Worlds* does do, however, is show that the closer the object’s degree of appearance is to the maximum of a world, the more promising the situation tends to be. Along these

lines, Badiou's theory of appearance could be misunderstood as a tool for predicting events. However, it cannot do this because the existence of a site (the maximal degree of appearance) does not induce an event, it is the space in which an event is possible. Although this calculus can diagnose the existence of a tipping point, it is nevertheless powerless to apply even the slightest of touches that would cause the perilously balanced situation to reverse.

The reason is that *Logics of Worlds* preserves the acausal role of the event from *Being and Event*. Unpredictable yet punctual, the event remains as decisive and elusive as it is the in first volume, its occurrence is now a matter of conditioned rather than pure chance. Although the event cannot be logically predicted, there is, at the level of appearance, a sense of anticipation that something might happen that is lacking at the ontological level. However, what is anticipated as the world tends towards its maximum degree of intensity is merely the existence of conditions under which it is possible for an event to occur; in other words, it is the possibility of possibility that is anticipated. In my view, this does not provide a more historical account of the passage towards an event, but merely a more detailed account of why an event is rare. Although, in *Being and Event*, the generic being of the event is retroactively clarified in the logical time of Cohen forcing, ontology does not wait for an event to take place since it is as timeless as every element in the circumscribed space it interrupts. In this sense, the event is paradoxically immediate to each and every element in that situation. In Badiou's transcendental logic, however, the possible existence of an event is conditional upon the existence of the maximum degree of intensity of a world; anything less means that the possibility of an event is not yet possible. Insofar as analysis of the modification of the logical form of a world provides knowledge about where the situation is ripe for change, *Logics of Worlds* revises the recalcitrant theory of change in *Being and Event* since it admits that the analysis of objective existence has a role to play in the search for the site of possible political justice today, as we will see in the next section. However, this does not mean that critical analysis provides an alternative to 'the ontological constitution of worlds' (LW 293). Throughout *Logics of Worlds*: 'Being has the last word.' (LW 302) Relations are constrained in the sense that they are subsumed by an ontological infinity that is not intelligible within a world: 'the infinity of a world (its ontological characteristic) entails the universality of relations (its logical characteristic).' (LW 293)

Badiou's transcendental logic cannot serve as the basis for a more historical analysis of situations because it lacks an account of how relations are constitutive. Although Badiou goes to the trouble of providing a theory of relations, they are always



secondary to the identity of the entities that they link: the ‘relational’ existence of an object is defined in terms of its ‘self-identity’. In a revealing passage, Badiou introduces the mathematical deduction of this point (‘lemma C’: to define the intersection of two objects it is sufficient to know the identity of one of them) with a political example: ‘If you localize a typical anarchist (bearded, vociferating, etc.) on what is in common between his existence and that of a typical postman (dressed in blue and yellow, wearing his union badge, etc.) you only need to take into account the existence of the postman.’ (LW 272)

Badiou does not explain why he limits account of relations to the analysis of objects within worlds. The presumption is that since appearance is ontologically constituted, it is unable to produce anything in addition to that which is ontologically prescribed. However, this is merely a hypothesis and needs to be tested. This is a significant point because doing so would effectively put the generality of his earlier theory of the event to the test.

In fact, Badiou’s division in *Logics of Worlds* into three segments with distinct registers of conceptual demonstration —the *sui generis* ‘mathemes’ of the subject in Book I; the ‘established mathematics’ of the object in Books II, III and IV; and the ‘intermediary’ style of formalization in Books V, VI and VII (LW 389–90)—confirms that Badiou’s theory of the appearance of real change is conceptualized without the ‘deductive continuity’ of the mathematical apparatus of the transcendental. He conveniently avoids the question concerning whether it is not possible to develop the apparatus to a greater level of generality, or if he has chosen not to do so. Since the mathematical texts which he cites clearly state the possibility of doing this, it is my view that he avoids developing the apparatus further in order to maintain that his theory of the event is indispensable. The following statement from the section titled ‘Formalizing the Upsurge’ in Book VI is symptomatic of this choice: ‘from now on it will be a question of what is neither being nor appearing, neither ontology nor logic, but rather the aleatory result of what happens [*advient*] when appearing is unsettled by the being [*l’être*] it localizes.’ (LW 390) We know that, in Badiou’s philosophy, only the event is exempt from the constraint of being on appearing. Although, after *Being and Event*, we might expect the consequences of the event in appearance to be due to a subjective disturbance of appearance, in fact, this statement informs us that it is due to an ontological ‘jolt’ [*secousse*] of the site: the objective ‘signature’ of the event (LW 393) This is where the theory of the object takes over the role of the poem in *Being and Event*. The trace of an event in appearance is ‘the existence of a past inexistent’ (LW

453) and the logical consequences of an event follow from this. The key point is that, on this basis, a ‘body’ is constituted which can ‘bear the subjective formalism’ (LW 453).

This means that although the event cannot appear directly, as a site it can appear as an object without a subject since a site ‘*makes itself* appear.’ (LW 452) The ‘flash of time’ in which the event-site occurs is an ontological exception in which the axiom of foundation (which prohibits self-belonging/reflexivity) is momentarily placed in abeyance such that, from the point of view of the ontology of a world, its site ‘is not something that could *be*’ (LW 391). The site is ‘a sudden lifting of an axiomatic prohibition, through which the possibility of the impossible comes to be.’ (LW 391) There is no time for hesitation: the possibility disappears as soon as it appears because ‘the laws of being immediately close up again on what tries to except itself from them.’ (LW391) As Spinoza said: ‘there is no vacuum in nature’.<sup>65</sup> It is precisely this inevitable ontological normalisation of the exception that forces a change of world. Whatever occurred in the moment the axiom of foundation was suspended must immediately become subject to the axiom. In every case, the situation boils down to a classical alternative: either something happened which can be accounted for in terms of an already founded world or something ‘illegal’ happened which, with the immediate reinstatement of the axiom of foundation, forces a new world to consist. The proper inexistence of the object is ‘phantom-like’ because, although it belongs to the multiple that underlies the world, it does appear therein. Real change is ‘the “raising up” [*relève*] of this nothingness’;<sup>66</sup> ‘the tipping over of a nil intensity of existence into a maximal intensity’ (LW 343). It is only visible afterwards: ‘A re-objectivation of *A* will have taken place, which retroactively appears as a (new) objectivation of the site.’ (LW 394) ‘Broadly speaking, an event is a site which is capable of making exist in a world the proper inexistence of the object that underlies the site. This tipping-over of the inapparent into appearing singularizes—in the retroaction of its logical implications—the event-site.’ (LW 452)

Now, the question is: what is the connection between real change at the level of appearance and novelty at the ontological level? According to Badiou, the difference between the two formalisms—between ‘being-qua-being’ or ‘*onto*-logy’ and ‘being-there-in-a-world’ or ‘*onto*-logy’—is that of different styles of formalization (LW 39).

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<sup>65</sup> Spinoza, *Ethics*, I P15 SIV.

<sup>66</sup> I have followed Louise Burchill and gone against the conventional translation of *relève* as sublation in English translations of Badiou’s work; cf. Burchill, Louise, ‘Translator’s Preface: A Manifest Power of Elevation’, in Badiou, *Second Manifesto for Philosophy*, pp. viii–xxxiv.

The former ‘examines and unfolds decisions of thought’, while the latter deploys ‘a style of formalization that is both more geometrical and more calculating, at the boundary between a topology of localizations and an algebra of forms of order.’ (LW 39) Badiou identifies one obvious gap in continuity between the formalisms, that of the connection ‘between “generic procedure” and “intra-worldly consequences of the existence of an inexistent”.’ (LW 39) In the two-volume primer that Badiou wrote to accompany his seminars on category theory in the mid-1990s, recently published as *Mathematics of the Transcendental* (2014), Badiou not only shows that his theory of appearance preserves his intrinsic ontology but even goes as far as saying: ‘every object, thus everything that appears, is determined by its ontological composition’.<sup>67</sup> Serving as a transition from *Being and Event* to *Logics of Worlds*, those documents address the problem of the appearance of being in terms of how the transcendental is ‘defined by’ operations on parts of a given multiple. From that point of view, a multiple can be said to already include the logics of its own appearances (since there will nearly always be more than one way in which an element of a multiple can appear). In *Logics of Worlds*, however, the problem is more complex since the theory of appearance must also account for the appearance of an event and its consequences, which are certainly not given, and thus the appearance of a truth cannot be accounted for simply in terms of ontological determination. Recognizing this, Badiou speaks instead of the ‘double determination’ of ontology and logic (LW 303).

However, the problem is that Badiou’s philosophy requires more than a double articulation of retroaction, it requires a theory of the immanence of truths to ontology and appearance. The tangle is this: on the one hand, the appearance of real change as retroaction of the object on ontology demands that the ontological novelty discerned by the subject already exists; yet on the other hand, the incorporation of a truth in appearance is the logical support of the retroaction of the subject in ontology. Once we are no longer dealing with a given multiple, both ontology and appearance presume that the other always already exists.

As it happens, there is an established mathematical answer to this problem, namely sheaf-theoretical or geometric forcing, which intuitively ‘double negation sheaves’ that can turn out to have generic mathematical content.<sup>68</sup> Very generally, a sheaf is a

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<sup>67</sup> Badiou, *Mathematics of the Transcendental*, p. 223.

<sup>68</sup> Mac Lane, Saunders, and Ieke Moerdijk, *Sheaves in Geometry and Logic: A First Introduction to Topos Theory* (Berlin: Springer, 1992), p. 283.

logical tool of algebraic topology which tracks localized algebraic data attached to the open sets of a topological space, thereby articulating a whole. Although sheaves can be used to investigate a single topological space, they are more productively deployed between topological spaces, where their ability to think algebraic invariance across topological difference really comes into its own. The crux of this is the idea that a functor projects a sheaf from a topology with one base set into a topological space with a different base. In cases where the base of the codomain topology is unknown, it is possible that this procedure might effectively predict the existence of a multiple (i.e. the unknown base set) in terms of the cohomology of algebraic invariants. This kind of procedure is, by definition, extremely abstract, however an analogy can help to illustrate the point. Imagine an archaeologist attempting to piece together a bundle of ceramic fragments found at a dig. In an instance where the pieces are plain terracotta from, say, a plain Greek amphora, the archaeologist is limited to considering the shape of the pieces and how they can possibly be glued together to form a topological whole. If the archaeologist solves this puzzle, they will have found the amphora in the bundle of fragments, which, topologically speaking, has the form of a double torus. In another instance where the pieces are from an amphora painted in the geometric style, then the overall design of its surface makes it possible to understand how the pieces fit together without worrying about the shape of the whole. In this sense, the painted design is like the algebraic information that a sheaf tracks across a topological space. Concerned primarily with the painted design, the archaeologist will not be troubled by the possibility that what they presume to be an amphora might turn out to be a jug—the fact that, topologically speaking, it has one hole rather than two will become clear after the design has been reconstructed. In sheaf theory, experimental applications of such functors can do this insofar as the algebraic invariance of sheaves can serve as a bridge to radically new forms.

Specifically, in sheaf-theoretic forcing ‘the topos-theoretic argument’ for ‘a Boolean topos satisfying the axioms of choice in which the continuum hypothesis fails’ turns out to have ‘essentially *the same mathematical* content as the original proof by Cohen’.<sup>69</sup> In other words, the celebrated method of forcing a generic extension in *Being and Event* has an alternative in sheaf theory. Furthermore, although Cohen forcing is celebrated as subjective process in *Being and Event*, it is theoretically possible that the same result could therefore be immanently produced within the transcendental realm of

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<sup>69</sup> Ibid., p. 283.

objective process, or what mathematicians call ‘sheafification’.<sup>70</sup> This abstract possibility is an extension of the formal mathematics Badiou makes use of in *Logics of Worlds*. At the formal level, this suggests that category theory is more enveloping than set theory, and it also calls into question whether the alleged ‘finally objectless subject’ of *Being and Event* ever eliminated the problem of *angoisse*.

Although Badiou mentions that the transcendental functor is a sheaf (LW 295), he doesn’t mention that the extension of the basic idea of a sheaf to an understanding of the ‘adjointness’ of sheaves with different underlying multiplicities yields a logical device more powerful than classical model theory—in fact so much more powerful that his choice of Cohen forcing can only be explained as a choice of his philosophy, specifically, one that opts for retroactive construction of the generic through subjective fidelity rather than the intuitive approach of sheaf-theoretic forcing. The absence of any discussion of this in *Logics of Worlds* is all the more curious given that, in Michael P. Fourman and Dana S. Scott’s ‘Sheaves and Logic’, the text Badiou cites as the source of his concept of the transcendental functor (LW 539), the sheaf theory of the latter is extended to what they call the ‘technique of *geometric forcing*’.<sup>71</sup>

It is easy to see why Badiou doesn’t mention this. If sheaf-theoretical forcing were admitted in Badiou’s theory of appearing, then it would be possible to construct generic extensions through the ‘objective’ process of the double negation of sheaves without an explicit ontology of the subject. This would cause considerable problems for Badiou’s philosophy, especially the theories of the subject in *Being and Event* and *Logics of Worlds*. The ‘subjective’ retroaction of Cohen forcing and the theme of ‘fidelity’ would merely be one way of constructing the generic. In the sheaf-theoretic alternative—‘a method of constructing models with particular geometric properties’—a corollary of the fact that the geometric consequence is ‘deducible *classically* from geometric axioms’ is that ‘it is deducible *intuitionistically* from these axioms.’<sup>72</sup> This point implies that, although Badiou is rightly committed to the idea of generic humanity without any criteria of membership, intuitionism maintains a stranglehold in the paradigm of generic sets.

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<sup>70</sup> Peter T. Johnstone, *Sketches of an Elephant: A Topos Theory Compendium*, 2 vols (Oxford: Oxford University Press, 2002), I, 198.

<sup>71</sup> Fourman, M.P., and D.S. Scott, ‘Sheaves and Logic’, in *Applications of Sheaves*, ed. by M.P. Fourman, C.J. Mulvey, and D.S. Scott (Berlin: Springer, 1979), p. 375.

<sup>72</sup> *Ibid.*, pp. 375, 378.

Furthermore, from the point of view of the alternative mathematical path of sheaf-theoretic forcing, we would need an account of an obscure subject which differs from the ‘*obscurantism*’ outlined in the ‘meta-physics’ of *Logics of Worlds* (LW 75–76). This is because we are neither dealing with the obscure ‘disintegration of the components of the faithful subject’ by humanist moralizing nor reactionary ‘*pedagogism*’, which ‘reduce[s] the new to the continuation of the old’ (LW 75). Instead we are dealing with the controlled production of novelty in a global system *not without* a subject—since sheaf-theoretical forcing can produce the same generic material as Cohen forcing there would be no need to construct the subject. As it happens, the Lacanian account of the subject as object cause is well suited for conceptualizing this alternative. The problem with this regarding Badiou’s use of mathematical formalism as the paradigm of generic humanity is that it would no longer be clear that people have a decisive role since the retroaction of the object would be dominant, and at every stage in its development it would be subordinated to a meta-body whose ‘components’, to use Badiou’s term, have always yet to become (LW 487). In addition, a stronger mathematical account of appearance would logically bridge the apparent ontological gap of the event and would therefore force Badiou to downgrade his problematic of the event from the ontological interruption to transcendental passage. This would imply that there are no truly discontinuous ‘events’ and would force him to concede that punctuation of being by the event can be thought alternatively as logical transformation. Of course, Badiou avoids all this by conceptualising the transcendental function as a limited mathematics of appearance.

In sum, we can say that, within a more extensive theory of the transcendental, sheaf theory actually poses a threat to Badiou’s philosophy because it can think the mathematical paradigm of the generic without a theory of the subject. By extension, it poses a danger to Badiou’s politics because the ability to bypass the subject would politically amount to the existence of what in the 1970s he associated with the structuralism of permutations: ‘mortifying social fascism’ (TC 92). Parenthetically, we should note that there is a symptom of this in *Logics of Worlds*. Badiou remarks: ‘Mathematicians, those unconscious ontologists, will say that the transcendental functor *FA* is a “sheaf” [*faisceau*].’ The French term *faisceau* derives from *fasces*, an axe whose handle is a bundle or ‘sheaf’ that was carried by a lictor in ancient Rome and later used as symbol of authority in fascist Italy.

Badiou’s limited deployment of category theory in *Logics of Worlds* is merely a means to think the extrinsic relations of what is intrinsically set-theoretically prescribed.

Regarding the relation of set theory and category theory, Badiou's Platonism decides on the priority of the former. Badiou's use of category theory does not problematize the choice of ZFC set-theory as the realm in which we can think being *as* being—far from it—the whole point of *Logics of Worlds* is to defend this choice from the intuitionist objection (initially voiced by Desanti) that, thus conceived, the ontological inscription of novelty lags behind the investigative work of extrinsic logics. At the very general level, it is logic that poses the biggest threat to Badiou's ontology (which presupposes the priority of pure mathematical material). As we saw in chapter 2, Badiou's early theory took the priority of logic as given, and therefore he has since had to clarify the limited role of logic after *Being and Event*. In 1998, he stipulated: 'We must show that the existence of a logic depends upon a truth process that is itself conditioned by a chance event as a decision about that chance event. After which the task is to show that there is a logic of truth but not a truth of logic.'<sup>73</sup> Specifically, this rules out the epistemological approach of *Concept of Model* according to which logic produces statements whose truth is verified by the construction of set-theoretical models. However, Badiou has not convincingly demonstrated that this is the case. To do so he would, at the very least, have to develop the logic of appearing further than his 'Greater Logic'.

There is a place in which this could have been done in *Logics of Worlds*: In Book VII Badiou addresses the important question 'What is a body?'. His resolutely non-organicist answer is that a body is an exceptional type of object. 'The singular object that makes up the appearing of a subject is a body.' (LW 453) Moreover, its theory is 'the "useful" distillate' of the laborious theories of appearance and change because it specifies the multiple-being that is 'the very singular type of object suited to serve as a support for a subjective formalism, and therefore to constitute, in a world, the agent of a possible truth.' (LW 451) Since it is the appearance of a subject, a body is constituted retroactively after an event (LW 453). In twentieth century mathematics, Badiou reminds us that sheaf theory emerged after the event of algebraic topology, as the new 'body' of algebra whose novelty concerns the fact that it is defined *over topology*. In fact, his theory of the subjectivization of new bodies in general is based on this example.

The subjectivization of the new body will acquire the creative form of a constant broadening of structural correlations, of the 'visibility' of one structure in another. In particular,

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<sup>73</sup> Badiou, *Briefings on Existence*, p. 122.

‘reading’ algebraic structures in topological structures will become the key to contemporary mathematics. With the concept of sheaf, which synthesizes this type of correlation and serves as a general origin, there undoubtedly begins the history of a new body, for which Grothendieck arguably played around 1950 the same role that Galois played around 1830. (LW 475)

What Badiou doesn’t mention is that in its subsequent development, sheaf theory once again makes possible the kind of epistemological prediction of novelty that Badiou defended in *Concept of Model*.

#### THE IDEA AND THE ‘RÉVEIL’ OF HISTORY

I now turn to Badiou’s recent work on the idea of communism and his application of his theory of the object in *The Rebirth of History*. First, I will establish that, beyond the abstract possibility of incorporation in *Logics of Worlds*, Badiou’s subsequent elaboration of it as ideation is, for the subject that bears it, a tortuous and anxiety-inducing experience. Then, I will show that Badiou’s recent analysis of rioting is limited because it fails to address the anxious core of rioting: that different degrees of anxiety about the idea of politics have existed in recent years.

In the conclusion to *Logics of Worlds*, titled ‘What is it to Live’ Badiou clarified his statement that “‘to live” and “to live for an idea” are one and the same thing.’ (LW 510). Behind this is Badiou’s Cartesian Platonism of the idea. Truths are eternal, he contends ‘because they have been created and not because they have been there forever.’ (LW 512) In addition, a truth is created ‘through a subject’, it is ‘the evidence of an eternity’, and it ‘must appear in a world’ (LW 513). Last but not least, a life oriented by an idea is subtracted from what Badiou calls ‘democratic materialism’—the incapacity to believe in anything other than the existence of animal bodies and the diversity of languages. In this regard, ‘the advent of the idea is the very opposite of submission. Depending on the type of truth that we are dealing with, it is joy, happiness, pleasure or enthusiasm.’ (LW 511) However, the matter is not so simple: ‘A creation is trans-logical, since its being upsets its appearing.’ (LW 513) This point is introduced rather abruptly at the end of *Logics of Worlds*, however, Badiou does provide an example at the end of Book VII ‘What is a Body’. In his analysis of the early stages of the composition of the subject-body Red Army in China, Badiou remarks that in late-1927 ‘Mao is worried and understandably so’ regarding the disparate collection of ‘ingredients’ (‘workers and peasants, but also dodgy figures, déclassé individuals and



ex-thieves’) that were ‘the embryo of the future Red Army’ (LW 496). However, the unsettling affect of incorporation is not developed further in *Logics of Worlds*.

This is taken up in *Second Manifesto for Philosophy* (2009), where Badiou defines incorporation as: ‘ideation: the representation of the universal power of something whose immediate particularity is very often perilous, unstable and a source of anguish [*angoissante*] by dint of being guaranteed by nothing at all.’<sup>74</sup> He goes further, specifying the consequences of ideation at the level of the individual incorporated into a body: ‘ideation is that which, in the individual undergoing incorporation within the process of a truth, is responsible for binding together the components of this trajectory, then one understands that it is that through which a human life is universalized—at the cost, clearly of difficult problems with its particularity.’<sup>75</sup>

These difficult problems are a consequence of a Beckettian determination or refusal to give in. In a revealing move, Badiou chooses to illustrate this not with a political example but with the case of Cantor, whose creation of the generic concept of set subjected him to ‘an extraordinarily tormented ideation’ in which ‘he fully grasped the thought passing through him’, ‘right up to the limits of intelligibility’.<sup>76</sup> Against the mathematical and theological doxa of the time, Cantor exclaimed of the infinite: ‘I see it but I don’t believe it!’<sup>77</sup> In this regard: ‘ideation organized and modified the relation of the individual Cantor to the ordinary world, expressing his quality of an animal of this world who, tormented and almost shattered by the ontological violence of his thinking incorporation, was nevertheless not to give in.’<sup>78</sup>

Ideation is no less anguished in politics because the passage of the idea of communism through a collective of individuals is guaranteed by nothing in the world in which the individuals live. In taking up this theme in recent years, Badiou has renewed some of the key propositions of *De l’idéologie*: “‘correct [*juste*] ideas” (and by this I mean what constitutes the path of a truth in a situation) come from practice’ (CH 247); throughout history, popular revolts are examples of the ‘practical existence’ of

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<sup>74</sup> Badiou, *Second Manifesto for Philosophy*, p. 111.

<sup>75</sup> *Ibid.*, p. 116.

<sup>76</sup> *Ibid.*, pp. 113, 114.

<sup>77</sup> *Ibid.*, p. 114.

<sup>78</sup> *Ibid.*, pp. 114–115

communist ideas;<sup>79</sup> and, without the projection of the singularity of politics into the symbolic whole, history is an ‘empty symbolism’ (CH 236)—‘words matter little’ if they are not subordinated to the illumination of ‘the coming-to-be of humanity’;<sup>80</sup> The difference is that victory is no longer on the agenda. ‘Just as at the beginning of the nineteenth century, the victory of the communist idea is not at issue, as it would be, far too dangerously and dogmatically, for a whole stretch of the twentieth century. What matters first and foremost is its existence and the terms in which it is formulated.’ (CH 260)

Without the presumption of victory, Badiou’s current reformulation of the idea of communism is more straightforwardly anxious than the logic of *De l’idéologie* and *Théorie de la contradiction*. In 2007, Badiou claimed that communism is the ‘horizon’ of any genuine political initiative; that ‘communism is what Kant called an “idea”, with a regulatory function, rather than a programme.’<sup>81</sup> Two years later, in ‘The Idea of Communism’, he reframed the question of the status of the idea in Lacanian terms: ‘the communist idea is the imaginary operation whereby an individual subjectivation projects a fragment of the political real into the symbolic narrative of a History.’ (CH 239) With Kant, then, Badiou’s idea of communism is regulative in the sense of an axiomatic principle of practical reason. However, unlike Kant’s maxims of practical reason, Badiou’s idea of communism does not set reasonable goals, it demands fidelity to an endless task—making the true exist as truths. Within a political truth procedure, Badiou’s idea of communism operates in a familiarly Lacanian fashion, its historical existence is a transference or ‘transcription’ of an encounter with the ‘unsymbolizable’ real of politics (CH 247, 239). What better definition of the anxious object of politics could there be than this: ‘The idea is an historical anchoring of everything elusive, slippery and evanescent in the becoming of a truth. But it can only be so if it admits as its own real this aleatory, elusive, slippery, evanescent dimension.’ (CH 247)

Finally, as Hallward has pointed out,<sup>82</sup> Badiou’s conclusion that everything associated with the quest for victory in the twentieth century (including Marxism, the

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<sup>79</sup> Badiou, Alain, *The Meaning of Sarkozy*, trans. by David Fernbach (London: Verso, 2008) [2007], p. 100.

<sup>80</sup> *Ibid.*, p. 100.

<sup>81</sup> Badiou, *The Meaning of Sarkozy*, p. 99.

<sup>82</sup> Hallward, Peter, ‘Communism of the Intellect, Communism of the Will’, in *The Idea of Communism*, ed. by Costas Douzinas and Slavoj Žižek, p. 116.

worker's movement, Leninism) is no longer of any practical use is an excessive price to pay for maintaining the purity of the idea of politics. According to Badiou, our duty is instead to usher in 'a new modality' of communism: 'We have learned that we have to go back to the conditions of existence of the communist hypothesis, and not just perfect its means.'<sup>83</sup> In my view, this conclusion is further confirmation of the inequality of truth procedures in Badiou's philosophy. Although Badiou claims that the question of the existence of the idea of politics is not framed by the presupposition of victory, Cantor, the nineteenth-century figure he chooses as the paradigm of ideation, was tormented by truth, however his work was transformative and has endured. We have seen that Badiou remains absolutely committed to Cantor's truth procedure at the ontological level in *Logics of Worlds*, where ontology supports the conceptualization of the disjunction of worlds. In my view, Badiou's assertion that, today, politics is concerned with the birth of another world is ultimately a philosophical belief that the theory of appearance in *Logics of Worlds* is the framework for anticipating a new modality of communism, which, due to the constraints of this framework, cannot be more than fragments of the True. This belief is in turn based on philosophical confidence in the timelessness of mathematical truths, permanent mathematical structures, which serve as the stabilizing counterweight to the anguish of ideation in politics. Although Badiou has not made this explicit himself, he would likely agree that in this configuration, anguish cannot be eliminated, it is an inherent condition of political incorporation.

In the second half of this section I will consider the forms of political anxiety inherent to the phenomena of rioting today, which Badiou celebrates in *The Rebirth of History*.

The '(optimistic) hypothesis' of *The Rebirth of History* is that, not only has history reawakened with the advent of 'the historical riot' in Arab countries (RH 54), but since 2005, when blazing riots once again stormed Paris, the subjectivity of the 'latent riot' has returned in Western countries (RH 28). As such, 'an era has opened' in which the world is fraught with the possibility of riots', or 'at least of the possibility of their possibility.' (RH 28)

In Badiou's analysis, the possibility that an historical rupture could take place within a Western country is explained in terms of the intensification of what he calls 'immediate' rioting. He defines an immediate riot as one which is limited in its

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<sup>83</sup> Badiou, *The Meaning of Sarkozy*, p. 116.

appearance to places in which rioters nihilistically ransack and destroy the districts in which they live, which ‘achieves a *weak localization*’ (RH 24). According to Badiou this form of rioting, which is invariably sparked by a police shooting or the perception of a similar injustice in a working-class or poor neighbourhood, spreads ‘*by imitation*’ as youths in areas with a similar demographic follow suit. For example, in 2005 riots almost identical to the one in Clichy-sous-Bois sprung up to other estates in Paris and across France; and in 2011, the riots that began in Tottenham extended in a similar way to parts of Hackney and Croyden.

Although an immediate riot is ‘often the initial form of an historical riot’ (RH 22), this qualitative shift is not inevitable as simply a matter of time. Badiou provides three conditions of strong localization. When the first two of these conditions are met, the intermediary stage of the latent riot is achieved. The first is the ‘*displacement*’ (RH 24) of the original riot to an inner-city ‘central site’ where, in ‘an essentially peaceful fashion’, the riot gains an extension of time by occupying a public space, where the crowd stubbornly remains until their demands are met. Secondly, ‘the clamour of the immediate riot’ becomes a people provided the individuals unify into a heterogeneous mass who support and protect each other. At this stage, which is as far as things have recently gone in Western countries, ‘the latency of the riot attests to the fact that circumstances can extract from our apathy an unforeseeable life beyond our lethal “democracies”.’ (RH 32) In other words, the latent riot is anxiety inducing in the sense that it is the first sign of a possible truth. Finally, an historical riot occurs when what members of this group have in common is clearly formulated in terms of ‘a single slogan that envelops all the disparate voices’. This coordination and concentration of the dissonance of voices is crucial insofar as this creates ‘the possibility of a victory, since what is immediately at stake in the riot has been *decided*.’ (RH 35)

*The Rebirth of History* provides an account of how rioting qualifies as an event. Written in ‘the initial post-riot period’ of the Arab Spring when the future of the actual historical riot in Egypt was ‘uncertain’ (RH 38), the clarifying power of retroaction is nevertheless evident: an event has taken place as the conscious intensification of a site without reference to the miraculous intervention of chance. Beyond this, the familiar problem of how to subjectively preserve the generic character of the impetus remains.

In Badiou’s rather optimistic view, the subjective for-itself of the peaceful ‘organization faithful to the historical riot’ is ‘capable of bringing into being the idea of justice, equality and universality’ even though the subject is engaged in ‘a bitter fight over the new constitution’ with the objective force of ‘the army, unimpaired remnant of

the previous regime' (RH 88, 87). In such a situation, the specification of '*crucial points* through which the consequences of the idea absolutely must pass' needs to be supported by a means of achieving the 'victories, point by point' (RH 89). Although Badiou remarks that the military were prepared to sacrifice 'the Mubarak clan to popular anger' (RH 88), he does not draw the obvious consequence that the retroactive meaning of the slogan 'Mubarak clear off' was determined by the military's temporary strategic alignment with the historical riot, and that this turned out to be 'retrospectively legislating on the significance of the riot'; such that the retroactive structure of the riot is the time of the military coup rather than the 'collective time' of 'the generic idea of this people' (RH 89). Sometimes the continuation of the time of the state is more obviously dominant. In Taksim Square in 2013, we saw that when an historical riot takes place in a state where the armed forces remain by and large loyal to the existing leader, the subjective force of peaceful fidelity is literally bulldozed.

In *The Rebirth of History*, Badiou uses a version of his theory of the object to advance the thesis that the state is 'an extraordinary machine for manufacturing the inexistent' (RH 71). In what is essentially an updated version of Althusser's theory of the ideology of the state, the mechanism of the 'identitarian object' both dupes a community into identifying with 'an imaginary object' such as the fiction of 'being-French', and specifies the permanent possibility of 'dispelling' this myth by thinking the true, generic 'norm' of the people as a whole (RH 73, 77, 78).

As we saw in the previous section, for a subject-body to appear, the retroaction of the object must kick-in after the event. However, in *The Rebirth of History* this is deferred since the time of the historical riot is without an object: 'The great rallies in Egypt [...] have occurred publically without any identitarian selection.' (RH 78) As such, the historical riot is a 'pre-political *event*' (RH 69); politics proper 'exists *when the power of the generic is preserved outside the movement, outside the riot.*' (RH 78) In something of an understatement Badiou remarks: 'This problem is manifestly as difficult to resolve as a problem of transcendental mathematics, if not more so.' (RH 80)

At this point in the development of its sequence, the Egyptian example seems to be further evidence that 'the generic doesn't survive beyond the time of the riot' (RH 79). What we can say with certainty though, is that a nascent political subject existed before it vanished. As I have already indicated, this was not due to 'the absence of an active idea' on the side of the assembled people. To my mind, it can serve more usefully as an example that the type of fictional identity remains, for a brief time, genuinely in the balance even though afterwards it turned out that 'a statist return of identitarian

fictions is inevitable' (RH 79). Although this effectively involves the concession that a pure form of generic existence remains indiscernible beyond the transient appearance of an historical riot, it has the distinct advantage of highlighting the potential for such an event to serve as the inspiration for more egalitarian forms of organisation. To this end, it seems to me that the party form remains indispensable since it is the most likely means by which the political energy of historical riots could be converted into longer lasting effects. Although the subject of the Egyptian riot encountered the real of politics today, without a form of effective organization it has so far only exemplified the vanishing subject of political anxiety.

One consequence of Badiou's break with the party form is that he has showed hardly any interest in recent attempts in Latin America to construct a quasi-socialist state. Hallward has noted that Badiou even views the persistence of a non-Maoist form of organization in these mobilizations 'as the equivalent of mathematicians who, oblivious to the revolutionary developments of the nineteenth century, continue to remain faithful to the old Euclidean form of geometry.'<sup>84</sup> In a recent interview, Badiou even labelled interest in Chaves the 'revolutionary exoticism'<sup>85</sup> of Western academics who want to believe that there is a genuine 'elsewhere' today. However, despite the fact that the proverbial economic chickens are now coming home to roost, for a relatively long period of time Chavismo demonstrated that it is possible to do something more than episodically interrupt the status quo of the neoliberal order.<sup>86</sup> Although Chavismo was built on the obvious economic and social compromises that are necessary to take and secure control of the state, up until 2006 at least, it could hardly be accused of subordinating subjective principles to economic concerns. On the contrary, the economically reckless decision to borrow when oil prices were unsustainably high provided funds for the construction of a state intended to address the needs of the people who had previously been excluded. Even if the economic failure of Chavismo was predictable, it deserves to be evaluated in terms of what it achieved in the time this took to unfold. Badiou's taste for '[t]he intensity of life against the insignificance of survival'<sup>87</sup> is so selective that he prefers the burst of the historical riot to years of partially successful social programs. Chavismo did at least show that it is possible to

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<sup>84</sup> Hallward, 'Communism of the Intellect, Communism of the Will', p. 115.

<sup>85</sup> Badiou, 'From the "Red Years" to the Communist Hypothesis', p. 97.

<sup>86</sup> Gandin, Greg, 'Down from the Mountain', *London Review of Books*, 39.13 (29 June 2017), 9–12.

<sup>87</sup> Badiou, *The Century*, p. 164

replace the identitarian object of what Badiou calls ‘gangster’ capitalism with a more socialist form. A more pragmatic approach would combine an interest in the effervescent appearance of the generic with broad support for impure but longer lasting forms of state collectivism.

However, this more pragmatic approach is incompatible with Badiou’s substitution of fidelity for the critical capacity of the subject and his obsession with the figure of the ‘renegade’. For Badiou, any party-subject that emerges from an historical riot is by definition a compromised organization and has therefore already ‘reneged’ on truth. However, his recommendation to withdraw support from the majority of political organizations that do not attempt to solve the Maoist problem of the party seems to me more likely to stifle the short-term future of politics. Instead it is necessary to clarify conditions of support and sharpen the critical capacity to track the development of the structural weakness such that it is possible to evaluate up to what point that organization remains useful. In fact, this does not only apply to organizations that might emerge out of an historical riot. The crucial difference between Chavismo and the historical riot is that the former was built on the authority of successive victories at the ballot box and therefore does not provide an answer to the problem of a form of organisation that can stay true to the sudden appearance of generic humanity in a riot. Badiou refuses to compromise on the purity of the general will: ‘it is only during historical riots, which are minoritarian but localized, unified and intense, that it makes any sense to refer to an expression of the general will.’ (RH 60) Of course, this is not to say that Chavismo is unrelated to rioting; as is universally visible today, Venezuela is in the throws of increasingly turbulent and in many ways reactionary riots calling for a return to democracy. Although the ongoing riots share some traits with the immediate and historical riots as defined in *The Rebirth of History*, they are irreducible to its formal categorization of riots today. Occurring on an almost daily basis throughout the spring of 2017, the riots in Caracas have taken place in the central business district but they have not occupied a public space. As the riots have swelled, students, workers and pensioners have unified. The slogan ‘no more dictatorship’ lends a semblance of unity to the different voices of these groups. Beyond this, the demand is not entirely clear: there is no doubt that the masses in Venezuela want to survive as food becomes increasingly scarce, however it is not clear that the masses are unified against the regime. In sum, these riots do not signify the possibility of exiting ‘gangster’ capitalism, but rather the end of an alternative to it. To this end, they resemble the Solidarnosc movement in Poland which was ‘bereft of any new idea about the country’s possible

destiny', and therefore ultimately lacked 'universal vocation' (RH 37–38). This type of riot exemplifies the third aspect of anxiety: the return to the injunction of the super-ego, which in politics is the law of capitalist exchange.

Although *The Rebirth of History* makes a passing reference to past riots that 'heralded the end of the clear days of revolutions' (RH 37), it does not consider the possibility that our time of riots also includes this phenomena. Contrary to their role as the intensification of conditions under which an evental site comes into existence, riots can equally serve as the popular channel of retreat from incorporation in a state that can no longer deliver a key pledge such as the reduction of poverty. Structurally, the change of circumstances in Venezuela was precipitated by the fall in oil prices, which exposed the obvious flaw in building a socialist state around an oil-based rentier economy. In an economy where oil revenue accounts for 12% of GDP this has been devastating: Venezuela is now virtually unable to repay foreign debt, which stood at a staggering \$123 billion in 2016.<sup>88</sup> With less foreign capital at its disposal, the Maduro government has chosen to temporarily satisfy the creditors by diverting funds previously set aside for the reduction of poverty and social programmes. In addition, although some 'missions' of Chavismo have achieved real progress, for example, 'the vast reduction in illiteracy',<sup>89</sup> others, such as the price controls on food, were 'never properly institutionalized'.<sup>90</sup> Without an effective system for supply and distribution, price controls have inadvertently contributed to a burgeoning black market in a time of scarcity.<sup>91</sup> Maduro's cynical rhetoric has compounded these problems. Chávez very successfully consolidated his disparate support base with frequent speeches that emphasised the possibility of alternatives and the unifying power of love.<sup>92</sup> By contrast, in an attempt to galvanize support following a large anti-government protest in April 2017, Maduro delivered a speech of fear, calling thirty captured demonstrators 'terrorists'.<sup>93</sup>

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<sup>88</sup> Julia Buxton, 'Interview: Venezuela after Chávez', *New Left Review*, 99 (May–June 2016), 5–25 (p. 7).

<sup>89</sup> Martin Marinos, 'Aló Presidete: Hugo Chávez and populist leadership', *Radical Philosophy*, 180 (July–August 2013), 2–7 (p. 6).

<sup>90</sup> Buxton, 'Venezuela after Chávez', p. 25.

<sup>91</sup> Ibid., p. 15.

<sup>92</sup> Marinos, 'Aló Presidete', p. 4.

<sup>93</sup> Primera, Luis, 'Más de 30 encapuchados terroristas fueron capturados en movilización opositora financiados por Richard Blanco, informó Presidente Maduro', *Venezolana de Televisión*. <<http://vtv.gob.ve/>> [Accessed 14 May 2017]



To conclude this chapter, I will return to the question of *angoisse*, which we recall from chapter 3 concerns the problem of following the sign of a possible truth whilst avoiding the vanishing of the subject and subordination to the law of the super-ego. Although the problem of anxiety was suspended in *Being and Event*, it re-emerges in *Logics of Worlds* because, at the level of appearance, the subject is never properly without an object support. It is only possible to destroy ‘the identitarian object which the state fictionalizes’ (RH 92) provided another object comes into existence; the ‘death’ of the one object ‘is merely a consequence’ of the birth of another (LW 270). At the end of the exposition of the theory of the object in *Logics of Worlds* Badiou cites Spinoza’s principle of destruction as inspiration for this notion of equilibrium (LW 270): ‘No thing can be destroyed except through an external cause.’<sup>94</sup> Since, in the type of destruction affirmed in *Logics of Worlds*, a ‘re-objectivation of *A* will have taken place’ as the consequence of ‘the disappearing impetus of a strong (evental) singularity’ (LW 394), the fictionalizing power of appearance permeates this space from the moment it is cleared. Initially, the new object may not necessarily be identifiable, but it will turn out to have always been there. Therefore, the supplementation of the retroaction of subjective process with the retroaction of objectivation entails that with *Logics of Worlds* the temporality of afterwardsness is not limited to the intelligibility of the retroactive belonging of an event to the situation since the fiction of objects accompanies all ontological presentation. The retroactive clarification of the event’s being in the fidelity of a subjective formalism is, at every step of its unfolding, as much a condensation of another objective fiction as a destruction of the old one. In short, another object immediately fills the gap in appearance: ‘as soon as’ ‘the usages of logic’ are subverted, ‘logic takes back its rights’ (LW 394) The recent forms of rioting discussed in this section show that, beyond its most basic form as an act of pure nihilism, rioting is a form of political anxiety. These episodes serve as lessons that the enigmatic appearance of riots cannot be properly understood in terms of the objectless subject of *Being and Event*: riots are about something even if the object is only signalled, if it fails to crystallize, or if it exists in an impure form (as in the case of the Venezuelan state). As we have seen, *The Rebirth of History* contains two examples, the latent riot, which, in the capitalist world, is the signal of something beyond, and the historical riot which exemplifies the vanishing subject which disappears when re-objectivation turns out to be the restoration of capitalist order. To this we can add the

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<sup>94</sup> Spinoza, *Ethics*, III P4.

recent Venezuelan example of the desire to return to the capitalist order. Consequently, we can say that it is not only Western countries with latent riots that are ‘anxiety-ridden’ today (RH 32), but also ones in which historical riots take place, and even ones that constructed a more egalitarian form of the state but where riots are now a sign of inoperability.

In this chapter, we have seen that it is the privilege that Badiou’s philosophy accords to mathematics that compels him to supplement his ontology with a mathematical theory of the object. Although this adds some welcome features, such as the ability to move within a structure towards its limit point, this framework unduly limits the political capacity to organize to what is possible within a highly specialized and abstract formalism. In my view, this is not necessarily a limitation of the power of forms in general but a consequence of Badiou’s philosophical prioritization of mathematical form. An alternative always remains possible, namely privileging the connection between politics and philosophy, which, in concrete terms means beginning with existing forms of organization and putting philosophy in the service of their clarification.

# Conclusion

I have used the distinction of structure and form to frame my investigation into Badiou's reliance on formalist modes of thinking in art, theory and politics. We have seen that, in Badiou's early (anti-)novels, axiomatics operates at the level of aesthetic autonomy and is able to unify the detotalizing structures of language in the production of a work. In *Almagestes*, this power of form over structure provides an allegorical figure of political truth. Furthermore, by revisiting Badiou's axiomatization of Althusserian theory in 'The (Re)commencement of Dialectical Materialism' and his slightly anachronistic presentation of set-theoretical model theory in *Concept of Model*, we concluded that, in Badiou's early theory, truths of pure science are intelligible without reference to objects and without the function of a subject. After tracing the effects May '68 had on the formalism of Badiou's early theory, we found that the logic of Badiou's Maoist theory in the 1970s is inherently anxious, and that, in *Theory of the Subject* Badiou once again privileges mathematics to think justice and theoretically dissolve political anxiety about communism. Although this anxiety is avoided by the subject without object of *Being and Event*, it returns with the supplementary theory of the object in *Logics of Worlds*, and is the affect accompanying Badiou's notion of ideation in his recent work on the idea of communism.

My main argument in this thesis has been that the axiomatic formalism of Badiou's philosophy unduly limits his conception of politics to the invention of radically new forms of organization after the failure of Maoism.

In my view, the distinction of Platonic and Aristotelian approaches to form that has been explicit in Badiou's philosophy since *Being and Event* and that has polarized the reception of his philosophy could be usefully problematized by further investigation into Badiou's axiomatization of Plato's works, especially in terms of the restraint that results from this. A guiding question would be the extent to which there is a purification of the idea from eidos in Plato's dialogues comparable to that in the arc of Badiou's thought. With reference to Badiou's recent 'hypertranslation', or transformation, of Plato's *Republic*,<sup>1</sup> a fruitful way to approach this would be along similar lines to my reconstruction of Badiou's reading of Althusser in chapter 2. In other words, to ask: in

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<sup>1</sup> Badiou, Alain, *Plato's Republic*, trans. by Susan Spitzer (Cambridge: Polity, 2012).

what sense does Badiou axiomatize Plato? What are the privileged statements, and how do they constrain the construction of a systematic Platonism? And, to this end, what is excluded from the Platonic corpus?

In a more technical direction, this thesis has raised the question of Badiou's limitation of the category of sheaf in Badiou's theory of appearance. Further work in this area is needed to challenge Badiou more forcefully on his own turf and put to the test his assumption that formalist mathematics has privileged access to generic multiples.

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