Reza Naderi* The Place of the Subject in Badiou's Theory of Discipline

Badiou and the Theory of Discipline

The main motivation for the theory of discipline resides in Badiou's desire to answer the following question: if there are forms of human inquiry that we can call thinking, what are the conditions in which these forms can acquire maximality? What are the conditions in which the solutions to particular impasses might appear as a restriction on the space of what we can actually think and conceive? We think this is the motivation that has led Badiou throughout his career, as a logician, as a political thinker, as a militant, and as a philosopher. In other words, Badiou's encounter with various subject matters has always been from the point of view of examining whether the subject matter in question struggles with any internal or external commitments that suture them to avowed or unavowed presuppositions. Badiou's category of truth should be placed within such a context.

For Badiou, truth is that point where a subject matter, which we call a discipline, is pushed beyond its own point of impasse. This impasse, upon closer examination, is always caused by the subject matter being sutured to explicit or implicit presuppositions. Badiou's answer to this is very simple: de-suture from opinion. How do we know that thought is able to de-suture from opinion? Because mathematics exists! Mathematics is the singular form of thought that has been able to rupture with doxa. So, the effective, historical, and independent existence of mathematics provides a paradigm for the possibility of being able to de-suture from opinion. This constitutes Badiou's philosophical programme for our time: a return to classicism, and in particular to Plato, and the essence of this return is to re-establish mathematics as the paradigm of thinking for philosophy. In effect, in Badiou's assessment, we are still living in the Romantic era, in the era of poets, inaugurated by Hegel. The mark of this era is precisely the banishment of mathematics as the paradigm for thinking and its replacement with poetry. Under the reign of poets, we are no longer eternal, but mortals bound to fini-

* https://orcid.org/ 0009-0009-1910-2027 | mnaderi000@gmail.com

tude. The gravest consequence of the banishment of mathematics is the banishment of the category of infinite as the basis of our thinking.

For Badiou, thinking maximally is possible only if first and foremost we are committed to the infinite. In that sense, all forms of genuine thinking occur with this commitment in place, even if philosophy may operate differently and under the dominance of the finite, as it does today. A discipline is one way of formalizing rigorous thinking that distinguishes itself by such a commitment. A discipline is a space within which pure thinking becomes actual, within which the commitment to the infinite happens in three concomitant and compossible dimensions.

First is the dimension that determines the space of thinking with no reference to its exterior. There is the inside of the discipline, but there is no outside. Hence, the discipline is not defined by what is exterior to it, because the discipline does not recognize its exterior as something that exists. I call this dimension of the discipline its interiority. A discipline is defined by an interiority that does not have exteriority, or in Lacan's language, the Other of the discipline is *extimate*.

Second, a discipline does not begin according to a principle or ground. While disciplines do not recognize anything external to themselves, they are able to recognize each other. Hence, they carve out a space of operations for themselves. Such a space is not created at the expense of other disciplines, but is born anew by the discipline itself. We think this takes place when thought operates in an axiomatic register. Axioms are precisely presuppositions that are avowed. They are generalities, not generalizations. In that sense, while they are independent of each other, and one does not provide a ground for the other, together they create a space for thinking that is groundless and principle-free. I call this dimension of a discipline its beginning. According to this dimension, all disciplines are axiomatic forms of thinking. Axioms have emerged in order to make possible thinking in its interiority.

Third, disciplines progress. They advance when they are challenged by impasses that they can formulate in their internal language. Disciplines are historical sites, which means that they are evental. As per Gödel, the "real" of any sufficiently complex axiomatic system is that it is possible to build statements (known as Gödel statements) that are undecidable within that system. Mathematics teaches us that it is around these points (the undecidable state-

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ments) that a revolution in a discipline usually takes place. A great example of this is the famous Continuum Hypothesis. I call the tendency in disciplines to push beyond their points of undecidability and towards the maximality of thinking *the novelty of disciplines*.

These three dimensions of disciplines, their beginning, interiority, and novelty, are concomitant and compossible, and the condition of their possibility is commitment to the infinite.

Disciplinary thinking is akin to dialectical thinking in that both carve out a space for thinking as an interiority. Dialectical thinking is also only concerned with the interiority of the One, with unfolding discontinuities within a coherent logical space. But for the discipline, there is no One other than the closure of a space of operations that is circumscribed by its axioms – it is not dependent on some initial grounds or fundamental derivation of its logic. Disciplinary thinking is also akin to dialectics in the dimension of novelty. Dialectics is never the result of supplementation from outside. However, unlike dialectical thinking, novelty is not the result of the sublation of two to one. It always begins with the One of the discipline and splits this into what the discipline discerns and "in-discerns" about itself. It is precisely within the category of novelty and the orientation towards what is possible that the discipline manifests its character as a wholly subjective process without an object. Within the theory of discipline, the subjective is an index of the dimension of novelty.

The dimension of beginning is where discipline is most different from dialectics. Thinking the beginning presents an inherent discontinuity because this thinking must perform an irremediable break from the sovereignty of doxa, one that is more akin to producing creative hypotheses and critical interventions. Axiomatic thinking is the only mode of thinking proper to this violent discontinuity; it is the only mode of thought that makes its own presuppositions explicit – rather than the presuppositions of the doxa. Axiomatic set theory provides a way of thinking the dialectic of the universal and particular through generalities rather than generalization. The relation between the particular and the universal has usually been thought through generalization: the particular was thinkable by being categorized under the universal. In contrast, axiomatic thinking approaches a situation through a set of generalities (axioms) whose deductive power allows us to show what makes a situation thinkable. If the particular is unthinkable according to the system of sentences drawn from given axioms, then we add a new axiom that is consistent with the others so that this particular becomes thinkable. Moreover, by relying on ideas rather than ideals, we can experiment with the formal system directly, even in advance of the demands of the real; the real of the formal system is its own consistency. This form of deductive reasoning is impossible under the regime of generalization, since generalizations are related to one another (and ultimately derived from a super-genre), whereas generalities are independent of one another. On the other hand, the dialectic is generally ambivalent to what it begins with, and is therefore susceptible to generalization and requires a fixed foundation. As a result, dialectical thinking appears as a region or restriction of disciplinary thinking.

A formal system is part of every discipline. But since a discipline is a homogeneous region of thought, every part of this region can think its other parts. The best example of this is mathematics. A region of mathematics, say geometry, can be the object of formalization for another part, such as algebra, according to which the latter part can think (i.e. formalize) the former part. But by no means does this permanently fixate one part as the object and the other part as the subject since geometry can equally formalize algebra. In model theoretical language, the parts of a discipline can act as both a formal system and the model for a formal system. Disciplinary practice gains huge insight into its parts, and ultimately the discipline as a whole, by being able to think a part through another part of the discipline. This means that through disciplinary theories "about" a discipline, the discipline produces more of its own. This becomes clearer when a discipline is compared to a discourse. Discourses, for example the philosophy of science, have disciplines, such as science, as their subject but do not produce, nor claim to produce, disciplinary theories themselves. In all their forms, discourses attempt to find from outside of a given discipline the unifying principle according to which the discipline can be defined and organized. Discourses, in that sense, transcend the disciplines they study. In contrast, the assertions that a discipline produces about itself are part of the discipline itself. Discipline is immanence. It embeds what it thinks.

Disciplines are also highly experimental. What constitutes the so-called "objects" of a disciplinary practice are elements of the model that satisfy the propositions of a formal system. But recall that what is now a model for a formal system could later be a formal system in its own right. In this sense, a discipline

does not distinguish between subject and object. The experimentality of disciplines also stems from this character. The set of propositions that constitute a formal system always refers to a set. That is, the sentences within that system always seek interpretations within sets of objects of different kinds. The fact that the sentences of a formal system require interpretation implies that those sentences are not universally valid or invalid in the same way that logical sentences are. This means that in the last instance, those sentences are axiomatic in nature; they are produced according to decisions that are not based on some prior self-evident principles. However, the opposite of this is also true: every axiomatic system requires a structure for its interpretation. This points to an extraordinary experimental vocation of formalism, and in that sense the material structures, from machines to laboratories, are thoroughly formal. The experimental nature of disciplines is due to their axiomatic nature. Axioms are responsible for the rigorous experimental protocol of formal systems.

The axiomatic nature of disciplines makes them evental. There are conditions under which the formal systems contained in a discipline clash with each other and with the discipline's founding axioms. This is a mathematical certainty. It is under those circumstances that a discipline is subjectivized. It thinks its own foundation and through this, under certain conditions, it expands those foundations to open up new territories for its thinking. For this subjectivation, a substantial part of the body of a discipline (from theories to models and practitioners, to pens and paper, to signs and syntagma) must be activated towards the new possibilities that lie around the discipline's evental site - which points towards a new existence that was not there. If enough of the discipline's body is activated in this way, then the discipline can redefine itself to expand its territory and to absorb the new possibilities into its domain. The discipline thus expands. But prior to this, from a logical standpoint, the condition for this subjectivation is precisely the practice within a discipline by which parts of the discipline appear and are interpreted by other parts of the discipline. That is, prior to any subjectivation, and as its logical condition, there is an objective phenomenology that is in effect and which constitutes "the life" of the discipline.

The Place of the Subject

Before we elaborate on the ways in which the idea of the infinite reconstructs the category of the subject, it is useful to understand why this category has such a

central place in Badiou's thought. Indeed, why do we need a new thinking of the subject in the first place? Badiou's answer is that the subject is that operator of philosophy from which, in our time, the *compossibility* of Badiou's four generic procedures is drawn.

We recall from *Manifesto for Philosophy*¹ that, for Badiou, philosophy is the *space* for the compossibility of all four generic procedures: it is where these generic procedures together form a philosophical *vision* compatible with each particular condition. This means the following three things:

- 1. That there is an operation in philosophy that brings together the four conditions and helps us comprehend a certain *philosophical period*.
- 2. Such comprehension enables us to examine the philosophical period we are in, whose name, according to Badiou, is *modern philosophy*.
- 3. The period we call *modernity* has not ended, and thereby modern philosophy continues.

Philosophy has *conceptual operators* by which it *configures* its conditions. This configuration is what orients thought in each epoch, and it is the way philosophy thinks about a given epoch, as associated with a particular configuration. To understand these *operators of philosophy*, the first thing to note is that one of these conditions, or generic procedures, is always closest to an evental site and serves as the main referent for the deployment of the compossibility of the conditions.²

Such was the case for Plato, Badiou proclaims. There were two events within the situation relevant to Plato: the emergence of the city-state and the shift in the theory of sizes from the Pythagoreans, based on arithmetic, to the geometrical and continuous method of Eudoxus. Plato invented this configuration capability of philosophy and thereby created, for the first time, a space for both conditions: the operator of this configuration was the theory of Forms – operable across both politics and mathematics. At the same time, this operator bestowed a suspicious status on poetry and made love an indiscernible – that which is neither discourse (*logos*) nor knowledge (*epistémé*).

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¹ Alain Badiou, *Manifesto for Philosophy*, trans. N. Madarasz, Albany, State University of New York Press, 1999.

² *Ibid.*, p. 41.

A philosophical period is one in which "a certain configuration, specified by a dominant condition, persists. Throughout such a period, the operators of compossibility depend on this specification. A period creates a nexus out of the four generic procedures, in the singular post-evental state in which a generic procedure is inscribed into the space of thinking and circulation that philosophically serves as the determination of the time."³ In the case of Plato, Forms are under the domination of the matheme (and thus mathematics acts as the dominating condition over politics). Plato asserts this in his *Republic* by having the governor educated in arithmetic and geometry. At the same time, imitative poetry is kept at bay, as that form of art that demonstrates the flexibility of language to sustain sophistry.

The question for us is now whether there is a *modern* period of philosophy. The *postmodern* declaration in some way corroborates this: the modern period did exist and is now over, according to the postmodern philosophers. If so, then the question is: What was (or still is) the operator of the configuration of the modern period? To understand that, Badiou first enumerates three distinct episodes that should fall in such a period:

- 1. Europe's classical age, of Descartes and Leibniz, in which the mathematical condition was dominant under the Galilean event, whose intervention introduced the infinite into the matheme.
- 2. Europe's romantic age, of Rousseau and Hegel, in which the historic-political condition was dominant under the event of the French Revolution.
- 3. Europe's post-romantic age, of Nietzsche and Heidegger, in which art, with poetry at its heart, was the dominant condition. Badiou does not name an event for this episode, but mentions that the return to art was "through an anti-Platonic retroaction, in the operators by which philosophy designated our time as that of a forgetful nihilism."

In this temporal sequence, we observe a movement of principle, from which the compossibility of the generic procedure is drawn, from the three conditions involved in these episodes: science dominant in the first, politics in the second, and art in the third. But within this displacement, there is still an invariant,

³ *Ibid.*, p. 42.

⁴ *Ibid.*, p. 43.

from Descartes up to Nietzsche, Freud, Husserl, and Lacan. This invariant is the theme of the subject. This theme endured devastating destruction by Heidegger and his followers, but was subsequently recast within Marxism (the subject of revolution) and psychoanalysis (the subject of the clinic).

This means, for Badiou, that the category of the subject stands for the operator of the configuration that designates the period that we call *modernity*.

According to Badiou, such is the question of the fate of philosophy: Is our time up to the task of upholding and reinserting the category of the subject back into philosophical discourse, now dominated by linguistic and analytical traditions? Our thesis points to the new orientation of thought constituted by the Cantorian invention and axiomatic thought as that which overhauls the thinking of the subject, which we sketch by closely tracking it through the theory of discipline.

As much as the Cantorian revolution has caused a total reorientation of thought. in Badiou's eyes, another disorientation had already been at the essence of what he names the Age of Poets, whose central figures, from Hölderlin to Celan, began to think outside the categories of the object and the subject. But, there is a difference: while the Age of Poets did disorient thought by playing down the role of knowledge in the thinking of truths, today we need a reorientation. Therein lies the difference between Heidegger and Badiou. While for Heidegger the destitution of metaphysics, and the opposition of knowledge and truth, on their own, inform an orientation of thought according to which the philosopher will only need to harken to the poet, for Badiou there still remains one more step; a step that our poets were unable – or perhaps lacked the conviction – to take. This step consists of an effort to rethink in the lineage of Cartesian meditation. So, while a disorientation of thought had already been accomplished in at least continental Europe, the reorientation is something that remains a task for philosophy. In summary, philosophy must affirm that "Disorientation can be conceptualized."5 Badiou maintains that the category of the subject is the key to this conceptualization and reorientation.

That is why, throughout his career, Badiou's interventions have always taken place around the question of the subject: What can philosophy say (or not say)

⁵ *Ibid.*, p. 74.

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about the subject? The category of the subject has been a (if not the) central category of Badiou's philosophy. Early in his career, and in reaction to the proposal that grounds science in general, and the foundation of mathematics in particular, on the repressed figure of the subject, in his seminal essay "Mark and Lack"⁶ Badiou affirms that science has no subject because science does not have a lack that it cannot fill itself. In other words, Miller is wrong to look for some place within the signifying chain in order to metaphysically or metaphorically establish the primitive of the Lacanian psychoanalytical subject. The discipline of science does not rely on something exterior to the discipline.

Having banished the subject from the discipline (of science), in Theory of the Subject⁷ Badiou ruminates on another aporia: How can we think novelty in a structure? This thinking took us from the analysis of Hegel's Logic and the relation of Something and Other to the notion of periodization. We saw that while Hegel's Logic contains resources to think novelty beyond mere circularity, and hence according to the schema of periodization, he does not have an explicit enough categorization of the two dialectics, which Badiou denoted as structural dialectic (SD) and historical dialectic (HD). Badiou finds a more advanced theorization in Lacan. In this regard, he thinks that the great dialectician after Hegel was not Marx, Lenin, Sartre, or Althusser, but Lacan. According to late Lacan, an understanding of jouissance and the signifier requires a logic similar to what Badiou calls HD, in that the relation of these two is no longer that of a situation (language) and the situated (speech), which is captured through the structural logic of whole-part. Instead, language itself is situated and a source of exception. Singularity and regularity are both generated through the practice of language. Therefore, the relation between jouissance and signifier is better captured through the relation of forces, which is the central grammar of the historical dialectic.

While Lacan's thought can make irregularity thinkable, its model is based on the clinic. Badiou takes this theory and transposes it to the model that supports politics: the State, masses, and classes. While this theory justifies irregularity as a force with the same legitimacy and potency as the force of structure, in the

⁶ Alain Badiou, "Mark and Lack: On Zero", in P. Hallward and K. Peden (eds.), *Concept and Form Volume One*, London, New York, Verso, 2012, pp. 159–185.

⁷ Alain Badiou, *Theory of the Subject*, trans. B. Bosteels, London, Continuum, 2009.

life of an individual subject in the clinic, the analysis must finally find a cure in the structure of one's symbolic constitution. By changing the model from a correlate of analysis to a correlate of politics. Badiou expands the scope in which the concept of consistency emanates and operates. In the Lacanian model, consistency belongs to the imaginary register: while the knot is in the real, its effect is registered in the imaginary as consistency. When the knot is cut, this effect of consistency is also destroyed, as the knot is the cause (in the real) and the consistency is the effect (in the imaginary). There is an inconsistency here: from the way the singularity of the jouissance comes to cohabit the very constitution of the regularity of the language – this regularity being in fact the retroactive effect of singularity – we come back to the primacy of regularity again, which is protected by the knot. But why such a compromise? The answer, in my view, is that the model operative in analysis is insufficient to sustain the radicalism of which the theory is capable. Using the model for politics, Badiou shows that the real of the masses is not only thinkable, it is the source of consistency, the source of a newfound regularity. What Lacan's thought was capable of - the relation of singularity and regularity – had to eventually recoil in the face of the weak model to which he had to apply it – a model that was too limited to sustain the consequences of what was possible to think. And here was precisely where the subject as the black sheep of materialism came into the picture: the real of the (political) subject (i.e. the masses) is the provider and guarantor of consistency.

What does the move from interiority to novelty tell us about the category of the subject? The logic of the signifier borrowed its conception of the subject from outside of the logic of structure. In other words, it performed an ideological construction of this category. Badiou dismissed this conception of the subject by maintaining that the structure is an absolute interiority whose consistency is not dependent on anything from outside. The logic of force, however, reinstitutes the subject, but this time within the constitution of the structure itself. This way, while maintaining the absolute interiority of structure, a gap is opened up within the structure itself which harbors the subject – the subject is anchored in the very gap between the surface of the law and the real of the forces that the law "in-discerns", but in whose qualitative distinctions it depends. Subjectivization constitutes the moment when this qualitative indiscernible erupts to the surface, and the subjective process is that which keeps this eruption at the level of the ongoing operations of the structure. Novelty is the consistency brought forth by the subjective process, and thereby belongs to the category of the subject.

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From this, we now understand why Badiou's salient philosophical undertaking during this phase of his career is captured within a book entitled *Theory of the Subject*: novelty is a category that requires a theory about the embedded subject. The subject is that which fastens the interiority and novelty within the boundary of a discipline.

Hence, for Badiou, the Age of Poets establishes that access to truth presupposes the destitution of the category of object as what presents the being: object, in this view, is a correlate of knowledge and not of being or truth. For Badiou, the task of philosophy is to sharpen the achievement of poets from Hölderlin to Celan, whose insights take philosophy in an opposite direction from what the philosophical avatar of that age, Heidegger, had pronounced. In fact, contrary to what Heidegger had surmised from the poets, the destitution of the object does not mean the destitution of the subject. Rather, it enjoins us to think the subject independently, without a *vis-a-vis*. For Badiou, the ability to think the subject without object consists of a possible renaissance for philosophy.⁸ While Heidegger and the post-structural milieu were pronouncing the end of the subject, Marxism and psychoanalysis proposed its restoration. But both schools, ironically similar to Heidegger, missed the great insight of the poets and restored the subject at the expense of also restoring a form of object and objectivity (the proletariat and the object of desire). So, while their return to the category of the subject was warranted, their construction still owes too much to objectivity. For Badiou then, the task of philosophy involves a complete commitment to the withdrawal of the object, while traversing those theories that either abandon the subject along with the object, or buttress the subject while still being unable to forgo the object.

Below, we will examine one of these traversals, and it should come as no surprise that the philosopher whose thoughts are material to his task is none other than Lacan. Nor should it come as a surprise that, in our view, the main coordinates of this traversal are two pivotal thoughts: Badiou's commitment to the maximality of thinking and the idea of infinity.

Accordingly, we picked two encounters with Lacan involving the category of the subject, both definitive of what Badiou intends for this category. The first

⁸ Badiou, *Manifesto for Philosophy*, p. 93.

encounter is the very last meditation of *Being and Event*⁹, and the second is "Subject and Infinity".¹⁰ Our reading of these texts will take place through our main theoretical apparatus: the discipline at whose center is the idea of infinity. Through this, it will become evident, during the first encounter, that Lacan's formulation of the subject of the unconscious owes too much to the wrong side of Descartes: it owes too much to the *I* in *I think*. The proposal of this chapter begins by showing that Lacan's theory of the subject relies too heavily on the count-as-one of an individual, and thereby it is not capable of overcoming the Sartrean reflexive subject. Disciplinary thinking shifts the emphasis from *I* to *think*, or more precisely, "being thinks". The real, which is the *it*, is still a derivative of Descartes', rather than a recomposition of thought from the ground up. In this sense, we will investigate the thesis that the true motivation of Descartes' *cogito ergo sum* is disciplinary thinking, in which the new category of the subject will arise.

The second encounter takes place around Lacan's treatment of infinity. Lacan actually had engaged with Cantor in Seminar XIX, but makes it very clear that, for him, actual infinities are imaginary. However, Cantor is still useful to Lacan: the concept of actual multiplicity, understood as a set, authorizes psychoanalysis to speak of what the latter calls a unary trait. The theory of sets thinks multiples without totalization; it only thinks the *unicity* of each multiple. Lacan points out how psychoanalysis is still stuck with Freudian doctrine, because it needs a representation of otherness. However, this requires a unifying otherness. So, we can never operate in the model of the psychic apparatus with the idea that something of otherness is captured by the structure. In Badiou's terminology, nothing of the outplace is preserved as an outplace by the place. We are authorized to move further and no longer think identification and representation only in these terms, because Cantorian mathematics has shown us that multiplicity without unity, and only with unicity, is perfectly thinkable. We can distinguish between multiplicities, without unintentionally unifying them. So, the extensive treatment of multiplicities authorizes us to think otherness without subsuming it as a finite multiple under a common property. Therefore, for Lacan,

⁹ Alain Badiou, "Meditation Thirty-Seven: Descartes/Lacan", in *Being and Event*, trans. O. Feltham, London, Continuum, pp. 431–435.

¹⁰ Alain Badiou, "Subject and Infinity", in *Conditions*, London, Continuum, trans. S. Corcoran, pp. 211–227.

the gift of Cantor is the power to think unicity, which preserves otherness. This is what Lacan means by the unary trait, which states that something of the otherness is preserved by a trait. But, in *Seminar XX*, as we shall see shortly while reading Badiou's intervention, Lacan still maintains that the infinite must be thought of as inaccessible, something fictitious. The fact that we can think consistently about actual infinities and derive positive results from such thinking is totally out of Lacan's reach, not because it is unthinkable, but because Lacan has no name for that which is both inaccessible and consistent. This includes the fact that infinity is totally mis-measured by finitude, and is totally indiscernible from the standpoint of countable situations, but is still thinkable. These two positions, in successive seminars of Lacan, are, of course, inconsistent. Lacan accepts that it is possible to think the unicity of the multiplicity in extension (that is, in their existence), while claiming that we cannot accept actual infinity.

For this study, the Cartesian and Cantorian frameworks are combined: there is a way to think of the *cogito* and infinity within the same framework, which we call discipline. We claim that a rejuvenated understanding of the subject, in line with Badiou's work, involves a reconstruction of the subject using the idea of the infinite, and through this reconstruction we find that it is not the *I* or *it* that thinks, but the discipline itself. Let us now elaborate on these points.

The Subject and Cogito

For Lacan, the imperative to return to Freud was doubled by the directive to also return to Descartes. How can these two imperatives work together, Badiou asks. He provides the answer as follows:

The key to the matter resides in the statement that the subject of psychoanalysis is none other than the subject of science. This identity, however, can only be grasped by attempting to think the subject in its place. What localizes the subject is the point at which Freud can only be understood within the heritage of the Cartesian gesture, and at which he subverts, via dislocation, the latter's pure coincidence with self, its reflexive transparency.¹¹

¹¹ Badiou, *Being and Event*, p. 431.

Understanding the subject in its place is the key to understanding how the subject of the unconscious can only be understood as the *cogito*. How does Lacan link the Cartesian subject and the subject of psychoanalysis? What does the term *subject* mean for Lacan? He provides a thesis: the subject is the Cartesian subject, i.e. the subject of the *cogito* or the statement "I think." Lacan makes this point explicit in his *Seminar XI*:¹²

I dare to state as a truth that the Freudian field was possible only a certain time after the emergence of the Cartesian subject, in so far as modern science began only after Descartes made his inaugural step.

It is on this step that depends the fact that one can call upon the subject to re-enter himself in the unconscious – for, after all, it is important to know *who* one is calling. It is not the soul, either mortal or immortal, which has been with us for so long, nor some shade, some double, some phantom, nor even some supposed psycho-spherical shell, the locus of the defenses and other such simplified notions. It is the subject who is called – there is only he, therefore, who can be chosen.

In order to understand the Freudian concepts, one must set out on the basis that it is the subject who is called – the subject of Cartesian origin.¹³

Let us first make four quick remarks about the *cogito* that we think are salient to the present discussion.

Firstly, *cogito* is the subject of thought. It is only because the subject thinks that it is certain about itself. In addition, *cogito* is a subject of certainty. It is certain about its own existence, not about its essential being, but its existence as it presents itself in thinking: the mere fact of thinking is what the subject as *cogito* is certain about.

Secondly, the subject of *cogito*, which is the subject of thought and certainty, is not a subject of truth. The *cogito* suspends any considerations of truth: the

¹² Jacques Lacan, *The Four Fundamental Concepts of Psychoanalysis, The Seminar of Jacques Lacan, Book XI*, London, trans. A. Sheridan, New York, W. W. Norton & Company, Inc., 1998.

¹³ *Ibid.*, p. 47.

subject's thoughts can be true or false, they can be hallucinations, dreams or mistakes. Regardless, the truth status of these thoughts do not change the operation "I think".

Thirdly, the statement "I think therefore I am" rips away any particularity of what a subject is. A subject *is*, insofar as it *thinks*, and that eliminates all qualities and marks of empirical or substantial individuality, whether corporeal or non-corporeal. This emptiness at the core of the subject, marked by "I think therefore I am," is what makes it possible for it to engage with/in the world through a process that is devoid of any presuppositions – the process that we call the modern scientific process. In this sense, *cogito* is the true subject of science.

Fourthly, the statement "I think therefore I am" enunciates the fact that, insofar as I cannot doubt that the process of thinking is occurring, I am certain that I am. But the existence that is being affirmed is not the existence of a substance, but a process, since at this point, Descartes has not yet deduced a substance form in "I am". The Cartesian subject is thus the subject of the process of thought (the subject of enunciation) rather than the subject in the Aristotelian sense (the subject *I* in the statement "I am", or the subject of a statement) that is backed by a substance. The subject is *in* the enunciation, not *in* the statement.

What then are the grounds for Lacan claiming that the subject of psychoanalysis is the same as the subject of science, which is the Cartesian subject? In what sense is Freud Cartesian?

At the outset, we observe that the subject of psychoanalysis, what the practice refers to as the analysand – the person who asks for therapy – seems to be very different from the subject of the *cogito*. An analysand is firstly the one who suffers: if there is a *cogito* for the analysand, it seems to be more like: "I suffer therefore I am"! It appears that the subject of psychoanalysis is the subject of affects, not thoughts. In addition, the analysand is not the subject of certainty. On the contrary, an analysand is someone who mostly doubts: she does not know what is happening to her. She suffers but does not know why. An analysand, one who says "I suffer therefore I am", is therefore also a subject of doubt. The analysand who suffers and doubts about the cause of her suffering, also wants to know about the true reasons behind this suffering. An analysand is therefore not ambivalent to the truth.

What does the Freudian process do for such an analysand? It transforms the subject of suffering into a subject of thought. This process is called *free association*, through which the analysand is to speak her thoughts; to say what she is otherwise silently thinking. Free association transforms the subject of suffering into a subject of thinking, which is a step closer to the subject of *cogito*.

But an asymmetry exists herein: as the therapy brings more of the subject's affects into spoken words, and transforms the subject of affect into the subject of thoughts, it does not necessarily bring about certainty. In fact, just the opposite! To the analysand, the thoughts that she speaks about during free association may remain incoherent, inconsistent, insignificant, and meaningless. The analysand doubts the truth of her thoughts, and here lies the asymmetry between Descartes and Freud: for psychoanalysis, the moment of doubt is the moment that the subject of the unconscious *comes to be*. This was the case with Freud's discovery of the unconscious itself: it was his doubts about his dream thoughts that first suggested to him the existence and efficacy of the unconscious. Lacan mentions this point, and the parallel between Descartes' and Freud's experience, in the following way:

In a precisely similar way, Freud, when he doubts – for they are his dreams, and it is he who, at the outset, doubts – is assured that a thought is there, which is unconscious, which means that it reveals itself as absent. As soon as he comes to deal with others, it is to this place that he summons the I think through which the subject will reveal himself. In short, he is sure that this thought is there alone with all his I am, if I may put it like this, provided, and this is someone thinks in his place.

It is here that the dissymmetry between Freud and Descartes is revealed. It is not in the initial method of certainty grounded on the subject. It stems from the fact that the subject is 'at home' in this field of the unconscious. It is because Freud declares the certainty of the unconscious that the progress by which he changed the world for us was made.¹⁴

The dissymmetry pointed out by Lacan pertains to certainty: in psychoanalysis, the certainty is not found in the subject of thought, i.e. in the analysand, but is situated in the Other, or the analyst. It is the analyst who is responsible for the

¹⁴ *Ibid.*, p. 36.

presence of the unconscious.¹⁵ Therefore, the difference between Descartes and Freud, according to Lacan, can be summarized as follows:

We know, thanks to Freud, that the subject of the unconscious manifests itself, that it thinks before it attains certainty.¹⁶

In the end, the Cartesian subject is a conscious subject defined by its mastery over the process of thought. On the contrary, the psychoanalytic subject is subjected to language and the signifier. Both subjects exist insofar as they think, or more precisely, speak; both of their existences depend on speech and are in relation to the signifier, but these relations to the signifier are inverted with respect to each other. The relation of *cogito* is that of the mastery of the signifier, and the relation of the subject as unconscious is that of slavery to the signifier. In that sense, one may say that Freud is Cartesian insofar as he adopts the notion of the Cartesian subject, but it is a subverted subject.

There is another way in which the subject of the unconscious is a subversion of the subject of *cogito*: the existence of a substantial being becomes the existence of a process – the subversion of the *home* of the subject from the statement to the enunciation. This introduces a measure of ex-centricity, a divide, which Freud sought to exhibit in the relation of the subject to itself and to the whole experience of therapy. In *Écrits*,¹⁷ Lacan highlights the difference between where I am presented by my thought (the subject of statement) versus where my thought is (the subject of enunciation), which is captured in his re-transcription of "*cogito ergo sum*": *ubi cogito, ibi sum*.¹⁸

The subject of psychoanalysis, therefore, looks like a generalization of the Cartesian subject: first, the two moments of thinking/doubting and being/certainty are not at the same *place* in therapy (as we shall shortly see in Lacan's us-

¹⁵ The role of the Other in acquiring the certainty is also emphasized by Lacan in the case of the Cartesian *cogito*: Descartes, although he affirms the presence of the thinking subject, has to assume that the truth of even this affirmation is dependent on an Other who is not deceptive.

¹⁶ *Ibid.*, p. 37.

¹⁷ Jacques Lacan, *Écrits*, the First Complete Edition in English, trans. B. Fink, London, New York, W. W. Norton & Company, Inc., 1999.

¹⁸ *Ibid.*, p. 429.

age of topological surfaces). Second, the analysand is not the only constituent: the object (or the analyst), the couch, and free association are also constituents of the subject. Third, the relation of the analysand to analyst changes as the process evolves. So, although psychoanalysis still works within the overall framework of the Cartesian subject, it makes this architecture more complex.

So, when Badiou says that Freud can only be understood (according to Lacan) "within the heritage of the Cartesian gesture, and at which he subverts, via dislocation, the latter's pure coincidence with self," we understand this sense of *within* according to the above structure that not only *subverts* but at the same time *generalizes* what is meant by the category of the subject.

What renders the cogito irrefutable is the form, that one may give it, in which the 'where' insists: 'Cogito ergo sum' ubi cogito, ibi sum. The point of the subject is that there where it is thought that thinking it must be, it is. The connection between being and place founds the radical existence of [the] enunciation of [the] subject.¹⁹

Badiou continues:

The subject thus finds itself ex-centered from the place of transparency in which it pronounces itself to be: yet one is not obliged to read into this a complete rupture with Descartes. Lacan signals that he "does not misrecognize" that the conscious certitude of existence, at the center of the cogito, is not immanent, but rather transcendent. "Transcendent" because the subject cannot coincide with the line of identification proposed to it by this certitude. The subject is rather that latter's *empty* waste.²⁰

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The moment, or place, of certitude is where thought coincides with being. But that is not an immanent operation, Badiou claims. How does this stand with Lacan?

Lacan, throughout his early carrier after discovering Freud, was in search of a framework for articulating Freud's discoveries on a solid basis that would be sci-

¹⁹ Badiou, *Being and Event*, p. 431.

²⁰ *Ibid.*, pp. 431–432.

entific, while also non-humanist and non-essentialist. This leads Lacan to the concept of the *split subject*. As Badiou remarks, Lacan's "Science and Truth"²¹ is the primary source of this theoretical innovation and serves to highlight the important topological characteristics of the split subject. It is in this text that Lacan examines the status of the split subject as the true conceptual heir to the Freudian discovery of the unconscious, and how the rigor of the Freudian legacy might be maintained through this particular advancement. This, of course, amounts to a different reading of Freud's corpus, in particular from ego psychology, popular at the time and recognized by many of Freud's followers as where his legacy should reside.

Lacan proposes that Freud's work should be read in anachronological order (from later to earlier): from *Ichsplatung*, to the articles on fetishism (1927) and the loss of reality (1924). This allows the reader to grasp how the theory of the divided subject is the groundwork for the topography introduced through the terms (which Lacan opposes): *Ich*, *Über-Ich*, and *Es*. Lacan introduces the concept/term of *subject* to assist with the navigation of concepts introduced by Freud that, due to their lack of clarity, contributed to the *aporia* of depth psychology. Lacan professes that he borrowed the term *subject* from structuralism so that he could avoid the tendency to substantialize, or to confuse it with brain, mind, ego, or similar substance-like constructs. He asserts that Freud's second topography (ego, superego, and id) is best understood by thinking it through the concept of *subject*.

Freud's scienticism, although not completely adopted by Lacan, has very important consequences for the fate of psychoanalysis, one that should be preserved and continued. Lacan says that it is impossible to imagine psychoanalysis as a practice and the Freudian unconscious as a discovery without the birth of science in the 17th century, the century of geniuses. Lacan seems to allude to a science which could be applied to psychoanalysis, but one with a notion of subject (as a split between knowledge and truth and as the "two sides" of the Möbius strip). This notion will render irrelevant all humanist references in psychoanalysis.

As a practice whose main focus is human suffering, psychoanalysis should be fraught with humanist references, distinguishing it from the *hard* sciences. But

²¹ See "Science and Truth", in Lacan, *Écrits*, pp. 726–745.

Lacan does not like this proximal notion, and thereby stresses that "humanist references become superfluous in science, the subject cutting them short."22 This portrays the tightrope that Lacan walks between humanist and scientific domains, and, at least in this particular text, in relation to the Freudian legacy as well as reasons that are his own, he approximates psychoanalysis more toward science than humanism. As evidence, his references to two historical anecdotes show how a scientific posture for psychoanalysis (which Freud was also in favor of) helped psychoanalysis gain popular acceptance, and furthermore, inspired Freud to look for a scientific formulation of human behavior, which led him to the discovery of the unconscious. Lacan sees the root of the latter inspiration in the scientific tendency to formulate all physiology, both mental and physical, by the laws of thermodynamics. Lacan persists on a certain path that, in his view, helped Freud investigate the unconscious with scientific rigor. This is the same path that set Freud apart from Jung, and from ego psychology, which was popular among American Freudians at his time. Lacan finds it important to draw a line with these tendencies, and suggests an alternative formulation from another field of study: linguistics. Borrowing from the structuralist approach, Lacan introduces the subject, around which the unconscious can be elaborated and further developed, with a rigor analogous to scientific method, and without recourse to an *object*, which is the way in which both scientific (physics, chemistry, etc.) and non-scientific (Jung, ego psychology, etc.) approaches tended to conduct their studies.

Lacan specifically distinguishes the subject of enunciation from the subject of science, something only discernible from within the context of linguistics, and this is why he promotes this as a model for psychoanalysis. How can this similarity be mapped? Here is a short suggestion by Lacan:

It is in the realm of logic that the theory's various refractive indices appear in relation to the subject of science. They differ as regards the lexicon, syntactic morphemes, and sentential syntax.²³

In other words, in linguistics, there is recognition at the level of the basic operators of discourse (lexicon, syntax, etc.) with relation to the subject of enun-

²² *Ibid.*, p. 728.

²³ *Ibid.*, p. 731.

ciation and the subject of science (which we take to be the subject within the statement).

It is also important to point out that a science can be understood finally as a text about a particular subject. The subject appears in this text, the same way that I appears in "I think therefore I am." The I in this text is "the subject of science" partly because it is what a text is about – i.e. when a physics text discusses objects in motion, for example. Science is ambivalent to enunciation; what is important is the text itself. Compared to the sciences, the position of psychoanalysis is peculiar, as it primarily engages with the textual material of speech while its proper subject is the analysand. As such, while the speech (or text) is where the subject of other sciences will solely reside, the subject of psychoanalysis is where the speech is enunciated from.

Lacan's ingenious proposal is that there is nothing but speech, so if there is a *where* for the subject of enunciation, it is speech itself (so there is no depth psychology, no mind, soul, etc.). The subject of enunciation can only be found in what has been enunciated. This sounds enigmatic: How can that which enunciates be in the enunciated? Here is where Lacan's genius strikes again, by suggesting that the structure of speech should be viewed as a Möbius strip: speech is structured such that the two subjects (the subject of the statement and the subject of speech) constitute the two sides of this strip, and the split subject is the very split of the two-sidedness of speech, so that the subject of enunciation can be traced there.

How does psychoanalysis do this? This is where another of Lacan's famous formulations enters. Lacan declares that the unconscious is structured like language: that is, the unconscious is subject to linguistic operations. Therefore, the *analysis* in psychoanalysis is the practice of decoding those linguistic operations that allow us to recognize the specific discourse produced by the analysand's unconscious, which is incidentally intermixed with the analysand's conscious speech. That is why, as we pointed out in the foregoing, psychoanalysis employs the method of free association. In this method, the analysand speaks freely of thoughts as they come to her mind, and through the course of analysis, the analyst begins to recognize those patterns that express unconscious thoughts. We finally come back to this: both conscious and unconscious thoughts, both subjects, are found in speech, in the same text that is the vocation of the sciences, as the *I* appears in "I think therefore I am." This is perhaps yet another way to understand why the subject of psychoanalysis is finally the same subject of the sciences. And this is how, for psychoanalysis, truth and knowledge are finally sutured within the same medium. Science can never suture knowledge and truth: this much is certain following Gödel's proof. In Lacan's model, truth and knowledge are seen as two sides of the same strip, traversable through speech, and no longer localized within the same *domain* and thus subject to Gödel's incompleteness theorem: topology sutures what arithmetic could not. This is what Badiou alludes to in the quote above: certitude, knowledge about a subject can never be immanent to *where* the truth of the subject is – this truth cannot be obtained through or culminate in the former certitude – they belong to two sides of the strip only sutured through speech: certainty is never the vocation of the subject of unconscious.

The Lacanian subject is, therefore, a topological structure, where the truth of the subject is a void subtracted of all knowledge, yet maintained in a structure that is intertwined with the same conscious subject. This is what a split subject is, the split between (the subject of) truth and (the subject of) knowledge (if you cannot unite them, as per Gödel, keep them separate, but within one structure, aka a Möbius strip).

Lacan, in his *Seminar XIV* and *Seminar XV*, developed a schema to describe the relation of thinking and existing, as in the statement "I think therefore I am."²⁴ In this schema, the two sides of the statement, i.e. *I think* and *I am*, have no intersection: no part of one belongs to the other; in other words, the thinking being is without existence and the existent being does not think.²⁵ It is impossible to have both thinking and existing at the same time. This schema is a way, in a logical form, to account for the torsion within the structure of the split subject, which became thinkable through the topology of the Möbius strip. It is easy to see how the split subject supports the modalities of *I am*, underwriting con-

²⁴ Here we use Bruce Fink's representation of Lacan's schema. See Bruce Fink, *The Lacanian Subject, Between Language and Jouissance*, Princeton, New Jersey, Princeton University Press, 1995, pp. 44–48.

²⁵ Fink, and perhaps Lacan too, contrasts thinking with being, but we chose to contrast thinking with existing instead, for reasons that should be obvious.

scious knowledge and the certitude about who the subject (of the statement) is, and *I think*, underwriting the signifier, the unconscious thought, and the truth of the subject (of enunciation) at the same time. In fact, the only issue that remains concerns *therefore*, there is no relation between the two, other than both belonging to the same structural torsion that Lacan calls the split subject. This sense of *therefore* will not find any place in this logical interpretation of the Cartesian subject. Below, we will discover that the elimination of *therefore* proves to be an important step in positioning the torsion of thinking and being, not inside the subject, but inside the discipline.

Now, when Badiou emphasizes the localization of the void, he absolutely targets the center of this debate, because Lacan's project is precisely an attempt to suture the truth of the Cartesian subject (i.e. the void of knowledge, as we said before, not merely in "I think", but the mere process of thinking, that is, the pure act of enunciation) with the knowledge of *I am*, which is the conscious subject. In this sense, Lacan's project of split-subject could be understood as the coming to maturity of the Cartesian project in a pure formal structure. Why is it important for Lacan to suture the void and knowledge into a subjective structure? The answer seems obvious: because of the alternative results in various kinds of depth psychology; the void is placed either in a chemical/biological brain, or in transcendental substances such as the mind, the soul, pure practical reason, common consciousness, etc.

At this point then, we are faced with a decision as to the location of thinking. Descartes originally attributed this to the Cartesian ego as the human subject, which is entirely transparent and transcendental. With Freud, we find that the thinking *thing* is not precisely in the same place as that to which the statement of certainty refers. So, we at least have two places: a place of thinking (enunciation, doubt) and a place of being (statement, certainty). Lacan provided an architecture for this *spaltung* based on the structuralist theory of language. Speech is where both certainty and doubt, being and thinking, are woven together, whose topological paradigm could be thought in terms of a Möbius strip. In this architecture, the subject is the very split between thinking and being as the two surfaces of the strip. The two sides share nothing with each other: there is an empty lacuna that acts as the mere differentiation between being and thinking, which Lacan dubs the subject. How does this model measure up to our disciplinary requirements?

What Lacan accomplishes is extraordinary as he avoided the metaphysical and humanist presumptions looming behind the subject from Descartes to Sartre, and at the same time he was able to extend structural causality by distinguishing the law from the cause. This opened opened up a gap within the structure between the automatic unfolding of the signifier (*automaton*) and the agency that evades formalization $(Tuch\dot{e})$ – which we could name subjective causality, to distinguish it from structural causality. Despite this, however, Lacan's notion of the subject, similar to his forerunners, still remained sutured to the I of I think. Speech, which is ultimately the place of the subject, is ineluctably one's speech: for Descartes, as well as for Freud, Sartre, Husserl, and Lacan, thinking is ultimately sutured to the human individual. Miller, as seen at the very beginning of this study, had realized this and attempted to generalize the category of the subject such that it becomes the latent and repressed core of the logic of structure. According to the latter thematization, and inspired by Lacan's innovations, Miller argued that not just one's speech but any discourse, such as science or politics, is structured around a repressed kernel. Structure itself is not-all. Every structure forecloses or bars an element that paradoxically makes the structure consistent. Badiou uses this important discovery by Lacan: structure is not the place of consistency and stability, it is precisely the place of instability. This instability is the main reason for the metonymy of signifiers – inaugurated by a traumatic loss of jouissance. Accordingly, the subject is not constitutive of just an un-symbolizable excrement of the structure, but as Žižek puts it, "'subject' designates the contingency of an Act that sustains the very ontological order of being. 'Subject' does not open up a hole in the full order of Being: 'subject' is the contingent-excessive gesture that constitutes the very universal order of Being."26

We call Lacan's position *modest* because we think Lacan was justified in putting a *disciplinary* constraint on the reconstruction of the concept of *cogito* as a mere differentiation with a claim to universality. That is, ultimately, Lacan chooses to stick to *I think*, with the emphasis on the *I*, for the same reason that psychoanalysis is the only rigorous theoretical field where the statement "I love you" is relevant. The *I* in "I love you" connects to individuals. This move is justified precisely for the same reason that, in the procedure of love, the reference to the individual body still counts in a way that does not in any other procedure.

²⁶ Slavoj Žižek, The Ticklish Subject, The Absent Centre of Political Ontology, London, Verso, 2000, p. 160.

So, Lacan is correct in asserting that if we care how people come to be desiring subjects, how they come to inhabit their bodies, and how they come to desire other bodies, as psychoanalysis does, we must remain faithful to the idea of the Cartesian subject. Because of this, the I is a relevant concept, and a more general construction of the concept should not erase it, as psychoanalysis in the end is concerned with how thinking and the body encounter each other in an individual. We call this a disciplinary constraint because it makes the practice of psychoanalysis possible. In other words, seen through the lens of the disciplinary theory in which we are engaged, psychoanalysis as a practice is that which subjectifies. It is not the case, however, that the subject in the clinic involves only the analysand. Rather, it involves the whole experience of the analysis, including the sessions, the free association, the analyst, the transference, the theory, as well as the analysand. In other words, thinking and being reside in a situation that we call analysis, or in our parlance, within the concrete discipline we call the psychoanalytical situation. The *psychoanalytic* cure is therefore not the end of the discipline per se, but rather it only eliminates the dependency of the disciplinary subject on the external facets of the analysis: the sessions and the analyst. This is where the analysand is now capable of participating in the subjective experience, which is the discipline itself. That is where the constraint put on the individual human body becomes material to the practice of psychoanalysis - it becomes the boundary of what will have been the elusive cure.

The issue that arises is thereby not the constraints set in order to circumscribe the disciplinary practice, but rather concerns the generalization of the constraints as a rule of thinking as such. In Badiou's parlance, it is the suturing of thought to a particular condition of truth. This suturing, although heavily suggested by Lacan himself throughout his work, was never transformed by him into a *programme*, but, by his exceptional reader, his son-in-law-to-be, and the future heir to his theoretical legacy, Jacques-Alain Miller.

The other, and more important issue, regarding this generalization, which makes the conception of the subject in psychoanalysis unsuitable for us, is that the suturing of the subject to the chain of signifiers has the inaugural assumption of a lost or impossible object. Why is this important? Because the conception of the subject for both Lacan and Miller, as the case was for the philosophers before them, is effectively mediated through the object, and this does not bode well from either the perspective of axiomatic thought, or Badiou's perspec-

tive, which holds philosophy responsible for thinking our era through the category of an objectless subject.²⁷

In fact, the conception of an objectless subject is precisely what the theory of discipline posits: the discipline is the cogito; it is the discipline that thinks, not the *I*. It is only within the movement of thought, whose coordinates traverse actors, artifacts, assumptions, theories, discourses, and experimentations spread across a disciplinary landscape, that subjective thinking can take place. The discipline thinks its own being through axioms, which means disciplines can think their beginnings. As we have discussed in detail in the previous section, the main difference between dialectical and disciplinary thinking is that a discipline can think its own beginning, but a dialectic cannot - as axioms are the only viable means of thinking the beginning, through a violent rupture from presumptions based on opinions. And it is precisely through the thinking of beginning that the thinking of truths finds legitimacy, as the latter goes beyond what the discipline could think through its beginning: thinking truths is precisely thinking beyond the point of the impasse of the beginning. But that is the other aspect of axiomatic thinking: that it can summon itself to carry out the task yet again. An example of this convocation under the event of infinity in Zermelo-Fraenkel set theory (ZF). ZF (which includes the Axiom of Infinity) as a set of axioms could in fact recoil, as it did, in the face of the infinity event toward the foreclosure of infinity under the assumption of constructivism. This is the event operating as the cause. But, at the same time, the fidelity to the infinity event can orient thought toward the assumption of the generic, where event now operates as consistency. Ontology cannot decide between the two, itself falling short in the face of being's excess. This manifests the movement of axiomatic thought in two modalities: conveyance and composition. When the discipline conveys a concept, such as the generic, it does so by positing a new generality that supplements the set of previously posited generalities that had carved the being of the discipline. In the compositional mode, however, the discipline experiments with the avowed generality using the material available to it in the situation of

²⁷ This assertion is certainly true for the subject of castration, as the universal operator of subjectivation for Lacan. But, in his theory of sexuation, Lacan does develop a conception of the subject that is not wholly determined by castration alone. Properly speaking, that subject could be considered to be an objectless subject. We will examine that sense of subjectivity in Lacan in the next section.

which it is a discipline. This we have dubbed the discussion of the *token*, or the material condition of a truth multiple.

For example, when the concept of the party in power, as a consequence of the Lenin event, recoiled to an organized State, as an abstraction of the socialist society after the October Revolution (event as cause), Mao offered a different conception of the socialist state and the relation of the Party to the masses in which the Party, as an abstraction of the State, was supplemented by the Cultural Revolution (event as consistency). At this level, the Cultural Revolution is a generality that merely supplemented the original set of axioms that defined the discipline of socialist revolutionary politics conveyed by Lenin. The Cultural Revolution is the conveyor of a new set of axioms (Lenin's party + the Cultural Revolution, akin to ZF + infinity). However, this generality was put to work in the real situation of Chinese society. This experimentation amounted to having every cadre tend to crops for six months. The implementation of the generality or idea is the compositional modality through which an instance of the truth is approximated within the discipline. The debate in the politburo, the organization of brigades, the new regiments for the cadres, were all part of the *implementation* of the supplemented generality towards the truth of the Leninist doctrine of the dictatorship of the proletariat, the creation of soviets, and the dismantling of the State.

On this basis, we propose to think of the objectless subject as the discipline in its compositional modality. In that sense, the *cogito*, the "I think", is the discipline when perceived compositionally. In contrast, the being of discipline is always its modality in conveyance; it is what the discipline conveys of itself. As a result, "I am" is the marker of the thinking of the discipline over its beginning, its thinking over its being. Using this grammar, the phrase "I think therefore I am" conjoins the two modalities of the discipline. This is, in my view, what Lazarus meant for the discipline of politics: politics thinks its own thought. This is also what Badiou said about the discipline of science when he proclaimed that there is no subject of science. Science is that thinking which aims for its own interiority – at least science in the Bachelardian sense. Badiou further claims that art and love are regions of thinking that manifest the same characteristics as politics and science.

Thought in this way, we construe Badiou's exposition of the subject in *Being and Event* within the above general disciplinary landscape. The relation of the

subject to an event from one end, and to truth from the other, is best understood when we place that relation in the context of the dual modalities of the discipline. In that sense, Badiou has provided a more elaborate framework for how the compositional logic operates. In "Meditation 23", Badiou introduced the problem of *double origins* concerning procedures of fidelity. This problem referred to the naming of the event, which is the first step in an intervention. And the second is the operator of connection, the procedure of truth itself. The operator of fidelity emerges consecutively to an interventional nomination. Badiou calls this emergence of the operator of fidelity *subjectivization*. Thereby, subjectivization is an emergence of the Two: it is connected to the evental site through the intervention and it is connected to the situation through the operator of fidelity. Every intervention performs a naming, which puts into circulation a supernumerary name. But every such naming leads to a consecutive counting – a count that is different than the count-as-one of the presentation, and the countas-one of the State.

This counting is the second aspect of the subjectivization - the operator of fidelity. Subjectivization, designated by a proper name: St. Paul, Lenin, Cantor, is the coming together of a name, which names the event, and an operator of fidelity, which is the generic procedure of a simple encounter. However, subjectivization is neither only one or the other, but something in excess. From the perspective of the situation and its state, the name has no significance. The insignificance of the proper name of the subject is an attestation to the fact that subjectivization is connected to the occurrence of the void. The Two, in our view, should be understood as a commitment to the maximality of thinking, which is occasioned by events and as that which invokes this maximality. This maximality is then exercised by experimentation in thinking. By being able to issue statements whose truth will go beyond the established system, thought demands and occasions its extension. Therefore, we see a very clear resemblance between Lautman's views with respect to the way that generalities are identified or named, and how new theories are developed based on the inauguration of those generalities. Here we see the clear role of subjectivization, from one end caused by an event (the cause) and from the other oriented toward a truth (consistency). Ontology does not speak of this relation. As we have repeated time and again, ontology deals with the being of the generic as an impasse of the knowledge of the situation: the being of truth in general, whereas subjectivation is where a singular truth comes to exist in a situation, in relation to the occurrence of an event. The being of truth is compatible with ontology: ontology does not speak of truth but does speak of the generic and its being.

But this much we knew from Lacan too: we already knew that the real has a being. If the generic is the name of the real as truth, what does the association of the generic and the real give us that we did not have before? How do we think more of the real by utilizing the name *generic* or *indiscernible*? In two ways: because the real is not just an impasse to the knowledge of a situation, it is the source of its novelty too – the situation could change and the real of the situation is the guarantor of the possibility of this change. Accordingly, the relation of the real and the interiority of the situation is not only of the category of cause, but also of the category of consistency. This attests to the connection of truth and consistency - whose inner relation belongs to the disciplinary relation of novelty and interiority. But, the generic, although providing a guarantee of the being of truth, does not speak of the existence of a truth in a given situation. Badiou's philosophical edifice, starting from the possibility of an event and the existence of its evental site, to the act of intervention and the procedures of fidelity, speaks to the existence of a truth associated with a particular evental site. We can also refer to the latter as the local possibility of a truth. So, when Badiou says the "local status of a generic procedure" has dependence on "a simple encounter," we understand the above sense of the locality of a truth, vs. the ontological globality of the being of the truth that pertains to every historical situation in which an event decrees its void.²⁸

What constitutes a *simple* encounter? A finite set of enquiries, + or -, subsequent to the fixation of the name of an event, starting from its evental site. This procedure is so simple that it is non-prescriptive of the trajectory it should take: the encounter is completely aleatory. Although its effect is prescriptive (+/- results), its trajectory is not. That is how it is simple: it is an aleatory and unplanned encounter. The only thing that we can say about this encounter is that its trajectory starts from an evental site. Therefore, in its locality, we have a procedure whose genesis and progression are constituted by aleatory, non-prescriptive, and lawless encounters. Each encounter enriches the one or the other set of enquiries with the names of the elements according to whether or not they are affected by the name of the event.

²⁸ Badiou, *Being and Event*, p. 324.

From the perspective of this simple encounter, the truth (of that encounter) appears as an ideal: "a truth is the ideal assemblage of *all* the evaluations, it is a complete part of the situation."²⁹ We can perhaps say that the ontological being of truth as a *complete* generic subset of the situation appears to the locality of the above simple operations as an unachievable ideal.

This leads to a thought: If the subject is the discipline in its compositional mode, and if discipline is infinite, then what does the association of the discipline and the subject tell us about the subject? Is the subject finite or infinite? Here is where the conception of the locality is important. The subject is related to the locality of an event and the locality of a procedure. As everything local is finite, the locality of what determines the subject would mean that it is also a finite multiple. Using this conception of locality, Badiou provides a definition of the subject in which the subjection is *qualifiable* and *unqualifiable* at the same time:

Thought in its operation, the subject is qualifiable, despite being singular: it can be resolved into a name (e_x) and an operator (\Box). Thought in its multiple-being, that is, as the terms which appear with their indexes in effective enquiries, the subject is unqualifiable, insofar as these terms are arbitrary with regard to the double qualification which is its own.³⁰

What does being qualifiable mean? To me, the term qualifiable shall mean that the term subject is defined by a formula or predicate. The name guarantees the singularity of the subject: the singular name of the event is the source from which the subject inherits its singularity in the situation. The qualification (and thereby the predicative aspect) of the subject comes from the operation of fidelity. Furthermore, the matter of the subject is comprised of the terms submitted to enquiry at a given moment. Due to the aforementioned locality of the enquiry, the matter of the subject is unqualifiable. That is, the matter of the subject has no definable relation to the operation that indexes the terms of the enquiry (as + or -). This means that the multiple terms that constitute the matter of the subject is arbitrary and lawless. But the locality and thereby arbitrary nature of the enquiry finite: locality means finitude, and every finite multiple is discernible and there-

²⁹ *Ibid.*, p. 324.

³⁰ *Ibid.*, p. 395.

THE PLACE OF THE SUBJECT IN BADIOU'S THEORY OF DISCIPLINE

by belongs to the realm of knowledge. This means that the matter of the subject is not co-extensive with truth, despite the fact that "a truth proceeds solely via the assemblage of those enquiries," it always surpasses the finite support of the subjectivization that makes the truth proceed.³¹

The finitude of the subject is not in contention with the infinitude of the truth. The local configuration of an instance of the truth is always finite, because of its locality. But the truth, as an idea that supplements the thought of the discipline, is infinite in its extension and in how the discipline is conveyed.

What is the importance of all this? We believe that the category of the subject whose vicissitudes are discussed in *Being and Event* gives us the framework of how the discipline operates in its compositional modality, whereas ontology, and in general axiomatic thinking, constitutes the working of the discipline in its modality of conveyance. The discipline is a region of thinking that has no object. Its ground refers to no objectivization. The important claim is thus this: understanding the subject as what belongs to a modality of the discipline as a whole should give us a concept of the subject with no object. A non-referential and non-objective category.

The journey is quite amazing here: as the Cartesian subject is the original template according to which the psychoanalytical subject is constituted, the roots of the latter is evidently in philosophy, matured and ripened in psychoanalytical theory. Now we have a philosophy that takes the concept of the subject from psychoanalysis back into philosophy, by keeping the same commitment to formalism in defining its constitution.

This periodization is none other than the great philosophical exchange through the history of modern thought, and more specifically in our era between philosophy and psychoanalysis. For both, there is a truth, but whereas for philosophy the being of truth is trans-individual and eternal, for psychoanalysis, truth is singularly placed in the subject's unconscious. In addition, we now have a new possibility for conceptualizing the subject that emerges from the concept of discipline, from which we can also ingest Badiou's theorization of this concept from *Being and Event*.

³¹ *Ibid.*, p. 395.

But what does this theory, based on the concept of discipline, give us that the theory of the subject in Being and Event did not? Why do we need a different formalization aside from, or in addition to, the formalization that Badiou provides? The concept of discipline speaks to three crucial conceptual apparatuses in Badiou's enterprise: firstly, it speaks to his Platonism through the commitment to the maximality of thinking; secondly, it speaks to his fidelity to the Cantor event through the commitment to the idea of infinity; and thirdly, to his revolutionary politics through the commitment to the category of the subject. The discipline comes together in these three apparatuses, which gives a new logic that is more general than the dialectic. This generality allows us to finally see that what the category of the subject names at the historical level (the operator of compossibility in modernity), discipline names at the ontological level, that is, the trans-historical level (the conditions of thinking that make the thought of immanence, novelty, and the beginning compossible in general). In a way, we could even think of the Platonic form as a local name whose global instance is discipline. Therefore, "discipline thinks" is a trans-historical statement, whose name in modernity is "subject thinks" (and "form thinks" in antiquity).

Therefore, we are quickly arriving at a point where, with the concept of discipline, we are able to merge the Cartesian and Cantorian frameworks towards a revived understanding of the *cogito*, in the tradition of Parmenides as discipline in composition. And this, we believe, is the proper reconceptualization of the Cartesian meditation after the Age of Poets.

The Subject and Infinity

Lacan, in his theory of sexuation, develops two subjective logics: man and woman, each with its own determinations. This grounds a singular truth in psychoanalysis: there is no sexual relationship. This theory is of utmost importance to us for two reasons: first, in the position of woman, we can effectively recognize a *partially* objectless determination of the subject. Furthermore, Lacan proceeds to introduce infinity as the proper determination of this objectless subject. The focus of this section is precisely the encounter between Badiou and Lacan regarding the sense of infinity employed here. This encounter takes place in a surprisingly obscure text called "Subject and Infinity"³², in which Badiou mostly comments on a single passage from Lacan's *Seminar XX* (Chapter VIII, entitled "Knowledge and Truth").³³ The text Badiou quotes is as follows:

In that logic, on the basis of the fact that one can write 'not-every [*pas-tout*] x is inscribed in Φ x', one deduces by way of implication that there is an x that contradicts it. But that is true on one sole condition, which is that, in the whole or the not-whole in question, we are dealing with the finite. Regarding that which is finite, there is not simply an implication but a strict equivalence. It is enough for there to be one that contradicts the universalizing formula for us to have to abolish that formula and transform it into a particular. The not-whole becomes the equivalent of that which, in Aristotelian logic, is enunciated on the basis of the particular. There is an exception. But we could, on the contrary, be dealing with the infinite. Then it is no longer from the perspective of extension that we must take up the not-whole [*pas-toute*]. When I say that woman is not-whole and that that is why I cannot say Woman, it is precisely because I raise the question [*je mets en question*] of a jouissance that, with respect to everything that can be used in the function Φ x, is in the realm of the infinite.³⁴

Now, as soon as you are dealing with an infinite set, you cannot posit that the notwhole implies the existence of something that is produced on the basis of a negation or contradiction. You can, at a pinch, posit it as an indeterminate existence. But, as we know from the extension of mathematical logic, from that mathematical logic which is qualified as intuitionist, to posit a 'there exists', one must also be able to construct it, that is, know how to find where that existence is.³⁵

Lacan affirms the Aristotelian conclusion that the negation of a universal statement is equivalent to a particular negative statement. If I say "not all apples are red," I imply that there is *at least one* apple that is not red. In logical notation:

³² The original French title of this essay is *The Position of the Infinite in the Split of the Subject*, which is a far more crucial and interesting title than the one chosen for its English publication. This title almost summarizes the topic of this study.

³³ Jacques Lacan, Encore: On Feminine Sexuality, the Limits of Love and Knowledge, The Seminar of Jacques Lacan, Book XX, 1972–1973, trans. B. Fink, London, New Yok, W. W. Norton & Company, Inc., 1999.

³⁴ The marginal page number of the quote is 94 (which is the page number Badiou cites).

³⁵ Lacan, Encore: On Feminine Sexuality, the Limits of Love and Knowledge, pp. 211–212.

 $\neg (\forall x): f(x) = \exists x: \neg f(x)$

But Lacan puts a proviso on this. He says that this equivalency only works when x belongs to a finite set. In a finite set, when I posit \neg ($\forall x$): f(x), I must be able to find an x such that I could say $\exists x: \neg f(x)$. But Lacan thinks that this cannot be the case if x belongs to an infinite set. In an infinite set, there is no guarantee that I could find such an x. At most, I can say that such an x is probable but not determinate. But why does that make this equivalency less true in the case of the infinite? This is where Lacan appeals to intuitionist logic. In intuitionist logic, the existence of something is only guaranteed if that something can be constructed or demonstrated in a mathematical proof. This points to an explicit disparity in Lacan's text when dealing with two different logics, Aristotelian and intuitionist, which we will return to later in this section.

But why does Lacan use this logical jargon? The issue is that the function Φ , which stands for castration, is a universal function in psychoanalysis. Castration is a process through which a speaking (i.e. human) subject is made. As such, if *x* is a subject, in psychoanalysis, then (analytically) $\Phi(x)$ holds. The issue is that if $\Phi(x)$ is true, then how can we at the same time assert \neg ($\forall x$), $\Phi(x)$?

When Lacan says woman is not-all, and on that basis he concludes that there is no *Woman*, it suggests that, while there is a universal genus of *Man* that all particular men fall under, *Woman* is not such a genus, there is no generalization under which particular women fall, and thus there is no *Woman*.³⁶

The passage we cited above is from the 8th session of Lacan's *Seminar XX*. The passage was produced after the main lecture was over (apparently there was a quarter of an hour still remaining and Lacan continued talking). Lacan, who was excited about a lecture delivered by François Recanati four months prior to that date (during the first session, entitled *On Jouissance*), provides some re-

³⁶ One can only be a man if one assumes that there is an exception to castration in the set called Other. *Woman* is (one of the names of) that exception, and so is actually part of the masculine logic. It is important to highlight the dependence men have on *Woman*, and how this dependence does not go both ways.

marks regarding "the schema Recanati had to erase earlier," which apparently had to do with Aristotelian logic and the topic of *not-all* (*pas-toute*)³⁷:



Lacan's Formulae of Sexuation

This not-whole (*pas-toute*), in classical logic, seems to imply the existence of the One that constitutes (*fait*) an exception. Henceforth, it would be there that we would see the emergence in an abyss – and you will see why I qualify it thusly – of that existence, that at-least-one existence that, with regard to the function Φx , is inscribed in order to speak it (*s'inscrit pour la dire*). For the property of what is said is being, as I said earlier. But the property of the act of saying is to ex-sist in relation to any statement (*dit*) whatsoever.

The question then arises whether, given a not-whole, an objection to the universal, something can result that would be enunciated as a particular that contradicts the universal – you can see that I am remaining here at the level of Aristotelian logic.³⁸

It appears to us that Lacan's argument, comprised of both this and the previous quote, can be divided into three parts. First, he acknowledges that in Aristotelian logic, when one speaks of "not-all *x* satisfy $\Phi(x)$ ", one also implies that there exists an *x* that contradicts $\Phi(x)$. If I assume Φ is "is red", then the expression "not all apples are red" means that we can find an apple that is not red. Lacan then adds that this is only true if we are dealing with the finite. In the case of *x* be-

³⁷ We are using "not-all", which is what is widely used in the literature, and "not-whole", which is used in Badiou's "Subject and Infinity" and *Seminar XX* as the translation of *pastoute*, interchangeably.

³⁸ *Ibid.*, p. 102.

longs to a finite set, the existence of a particular x such that $\neg \Phi(x)$ is not only an implication, but also an equivalence. Such a condition is not necessary in predicate logic. In fact, as far as predicate logic is concerned, the equivalence of "not-every" and "there exists" is universally true regardless of the scope of x.³⁹

In the next part of his argument, Lacan considers the possibility of *x* to select over an infinite domain, and he says the following: "*then it is no longer from the perspective of extension that we must take up the not-whole* [*pas-toute*]. When I say that woman is not-whole and that that is why I cannot say *Woman*, it is precisely because I raise the question of a jouissance that, with respect to everything that can be used in the function Φx , is the realm of the infinite."⁴⁰ Lacan makes a turn here. He says that, in dealing with an infinite, *not-whole* domain, the logic in question should no longer be approached from the perspective of *extension*. What does this mean? Here is a possible reading: When I say "not all apples are red," I am referring to the sets of all apples. But when I say: "not all of an apple is red," the not-all does not refer extensionally; it refers to a single apple and says that not-all of that single apple is subject to the function *is-red*. It appears, solely based on this passage from Lacan, that the sense in which he wants to use the quantifier *not-all* suddenly shifts from an external scope (not every *x*) to an internal scope (not every part of *x*).

In the third part of the argument, Lacan is completely submerged in the discourse of the infinite: a point that pertains to the dialectic of existence and ex-sistence.⁴¹ Lacan says this: if we say "not all of *x* is $\Phi(x)$ " (based on an internal domain of *x*) and the domain is infinite (which is the case when Lacan speaks of woman's jouissance), we do not thereby conclude that there exists an *x* such that Φ is not true for it. In the context of jouissance, Lacan asserts that, unlike man's jouissance, not all of woman's jouissance is determined by the

³⁹ For example, see https://en.wikipedia.org/wiki/First-order_logic#Provable_identities, accessed 23 February 2022.

⁴⁰ Lacan, Encore: On Feminine Sexuality, the Limits of Love and Knowledge, pp. 211–212. Emphasis added.

⁴¹ For Lacan, existence is only possible in the symbolic register. We may refer to things that do not exist (i.e. they are not within the symbolic register), but this reference does not mean that they exist. Lacan's term for the sense of being of things that we can speak of but do not exist (i.e. they are not in the symbolic register) is "ex-sist". Lacan borrows this term from Heidegger.

phallus: this is made obvious by the double arrow to the crossed-out *Woman* (*Woman*) in the diagram, which illustrates that *Woman* has two partners, the phallus and $S(\mathcal{A})$, the signifier of the inexistent/inconsistent Other. Therefore, the assertion that "not all *x* such that $\Phi(x)$ ", in my view, should mean that part of *x*, woman's jouissance, is determined by its relation to the signifier of the Other, but by writing $S(\mathcal{A})$, Lacan indicates that he does not affirm the existence of the Other. Intuitionist logic can afford that to Lacan: it allows us to keep $S(\mathcal{A})$ at the level of ex-sistence instead of existence. This reading is confirmed by the second passage we quoted from *Seminar XX*, which is just before the original passage quoted herein. A little before the passage we cited, Lacan says:

Is there One or not? In other words, this not-whole (*pas-toute*), in classical logic, seems to imply the existence of the One that constitutes (*fait*) an exception.⁴²

Therefore, when we say "not all x is $\Phi(x)$ ", the question is: are we confirming, as Aristotelian logic requires us to do, that "there exists an x such that $\neg \Phi(x)$ "? We know that the Primal Father is the referent of the One in the above quote: there is a One who is not subject to the effect of castration. What is the existential status of the Primal Father? That is precisely what takes us to the next part of this quote:

Henceforth, it would be there that we would see the emergence in an abyss – and you will see why I qualify it thusly – of that existence, that at-least-one existence that, with regard to the function Φx , is inscribed *in order to speak it* (*s'inscrit pour la dire*). For the property of what is said is being, as I said earlier. But the property of the act of saying is to ex-sist in relation to any statement (dit) whatsoever.⁴³

What is implied by the not-all is precisely what allows us to speak of something that is not under Φ , but at the same time, this not-all does not force us to commit to "there exists", thanks to the intuitionist logic. In the end, we have a pure signifier for the Other, which has no existential commitment.

⁴² *Ibid.*, p. 102.

⁴³ *Ibid.*, p. 102, my emphasis.

In his Seminar XIX,44 Lacan had previously adopted a different strategy toward the same end, by elaborating on a proposition that has a similar construction: "Il y a de l'Un" ("There is something of the One," or "Sometimes there is One"), which he contracts as Yad'lun. After affirming the "Aristotelian angle" for the contradiction between "the statement that for all x, x fulfils in Φx the function of an argument, and the fact that there *some* x that can fulfil the place of argument only in the enunciation that is the exact negation of the former," he proceeds to say: "I'm daring to advance something that is plainly lacking in the aforementioned logic. I am able to do so to the extent that the term existence has quite certainly changed meaning since then." How has the sense of "existence" changed? When we say "There exists an x, at-least-one, lends a value that can be qualified as true to what is posited as a function." In this sense, we can say: "There is a distance between this and natural existence, which I will not name otherwise today, for want of a better word." This sense of existence is what Lacan attributes to the One, and it is why Lacan finds Cantor's invention of sets so useful: "the mainspring of set theory hinges entirely on how the One – that there is – of the set is distinct from the One of the element."45 In Lacan's mind, set theory supplies a sense of one (or oneness) without having to ground it in the one of being, or the existential sense of oneness and sameness (as we have seen Plato had attributed to Parmenides). Instead, the commitment to the one is grounded in the being of multiples, and as in set theory, there are nothing but multiples:

It is in this respect that it is, let's say, *inadequate* in the Platonic dialogue to make anything whatsoever of the *existent* participate in the realm of the *like-for-like*. Without the crossing-through whereby the One is initially constituted, the notion of *like-for-like* would not appear in any way whatsoever.⁴⁶

So, when Lacan refers to "there exists", this does not refer to the sense of existence from Aristotelian predicate logic. Instead, borrowing from set theory, he is "daring to advance" the existential sense of the standard quantifiers.

Jacques Lacan, ... or Worse, The Seminars of Jacques Lacan, Book XIX, 1971–1972, trans.
A.R. Price, Cambridge, Polity Press, 2018.

⁴⁵ *Ibid.*, pp. 120–124.

⁴⁶ *Ibid.*, p. 125.

This new "logic", proffering a sense of "existence" distinct from "natural existence", is the same sense that Lacan wishes to leverage when he speaks of the "infinite" field of woman's jouissance – the not-all. At the bottom part of the diagram, $\frac{Woman}{V}$ is connected to Φ and S(A). S(A) is that not-all which, at the same time that it signifies the non-existing Other, plays a part in formulating feminine sexuality. Using the foregoing interpretation, the sexuality (jouissance) of every woman is subject to the effects of castration, but castration does not fully determine a woman's sexuality (jouissance): it is a necessary, but not sufficient, condition. This is obvious from the first formula on top of the right side of the above figure that says $\neg \exists x: \neg \Phi(x)$: there is no woman who is not affected by castration, which means all women are affected by castration, but that is not all that determines their sexuality (unlike men). The key to this interpretation is, as we have said, to posit an internally scoped sense of the quantifier. However, in the sense of not-all, "there exists" does not predicate the existence of a thing outside of the effect of castration. That is why Lacan takes recourse in intuitionist logic, since what he wants in the end is a logic where the affirmation of *not-all* does not result in a "there-exists":

For an intuitionist, therefore, from the statement 'not for every x $\Phi(x)$ " there is no reason to conclude that 'there exists x such that not- $\Phi(x)$ ". On this point intuitionism coincides perfectly with Lacan's aim.⁴⁷

In intuitionist logic, the traditional concept of truth is qualified by the concept of constructive provability: a method of proof that works by demonstrating the existence of an object by creating or providing a method for creating it. Therefore, while predicate logic finds the proposition "not all *x* such that $\Phi(x)$ " to be equivalent to the proposition "there exists an *x* such that $\neg \Phi(x)$ ", such that the truth of one will imply the truth of the other, intuitionist logic does not consider these equivalent. Therefore, the truth of the former proposition does not imply the same for the latter: the existential statement must be independently constructed. This is, as Badiou points out in his commentary on *Seminar XIX*, exactly the effect that Lacan is seeking: woman, the not-all, has a relation to the phallic function, and nothing more – somewhere means not everywhere; the somewhere – not everywhere – of the woman's position is expressed as not-whole.⁴⁸

⁴⁷ Badiou, *Conditions*, p. 215.

⁴⁸ *Ibid.*, p. 215.

But is this a temporary alignment with intuitionist logic, or is Lacan an intuitionist? Badiou emphatically asserts the former. Lacan neither fully subscribes to intuitionist logic (e.g. the renunciation of *reductio ad absurdum* as per his approach in the interpretation of symptoms) nor renounces the existence of actual infinites (as per his usage of alephs). He even, in the first passage we quoted from Seminar XX, makes use of the Aristotelian logic of finite sets, something that an intuitionist would not agree with. The key that Lacan mistakenly sought in intuitionist logic does in fact lie on the side of the infinite. This confusing relationship with intuitionism points to another important matter as well. While intuitionism is not a branch of logic to which Gödel, Cohen, and Badiou subscribe, it is nevertheless one that many mathematicians have worked fruitfully within. This makes the debate between intuitionists and realists in mathematics an interdisciplinary debate, one that Lacan is not party to. Recall Badiou's detailed analysis of the ideological dispositions that are developed in relation to the sciences. As early as "Mark and Lack", Badiou had recognized two different representative stances, one transcendental to the sciences, such as epistemological theories, and the other immanent to a given science.⁴⁹ The latter stance represents what a science thinks about itself, and despite being ideological, is part of that science – furthermore, science already contains the means of eradicating such internal ideological representations. Hilbert's programme is evoked as such an ideological representation generated within the practice of mathematics itself – subsequently addressed by Gödel's inconsistency theorems. In contrast, we have ideological instances that are produced outside of a given science, those that do not pertain to the practice of the science itself. Miller's representation of the logic of the signifier is an example of this transcendental-ideological stance. Likewise, we could say that intuitionism is a representative disposition inside the practice of mathematics, and Lacan's usage of intuitionism, like Miller's, is an ideological disposition that is transcendental to the discipline of mathematics.

But there is more. While Miller's ideological usage of Frege's logic (itself ideological, but nevertheless intra-mathematical) amounts to a consistent programme, Lacan's usage here is not so. As per Lacan's articulation, we are dealing with an infinite field of woman's jouissance. Somewhere in that infinite field, there is also phallic jouissance. But does not the existence of this somewhere, by way

⁴⁹ Badiou, "Mark and Lack: On Zero", pp. 159–185.

of negation, also affirm the existence of the everywhere of the infinite, the notwhole? Lacan's answer is no: the not-whole, the everywhere that is infinite, is too indeterminate for the finite to be circumscribed by phallic jouissance. This thought of Lacan's is seemingly confirmed by mathematics: there is no dialectic between the finite and the infinite – the infinite is the absolute alterity and inaccessibility with respect to the finite. The paradigm of the absolute alterity of the infinite, as we have formerly seen, renders the Hegelian dialectic of the finite and the infinite impossible – the infinite is not the negation of the finite, nor its sublimation, but its inaccessible determination. According to the paradigm of the mathematical infinite, phallic jouissance functions similarly as the succession operator, such that, despite its unending insistence (an unending chain of desires), a circumscribed finite jouissance will never be commensurable to the infinite not-whole; the same way that no whole number is commensurable to ω :

This is a crucial adjective, both in set theory and in the logic of the formulas of sexuation. This enjoyment of the feminine not-whole is properly the inaccessible infinity in which castrated enjoyment is determined.⁵⁰

But in axiomatic set theory, ω is an actual number, infinite in size, but actual nevertheless – i.e. this number exists in the same way that the number 2 exists. But actuality is not what Lacan is after. It is enough for him to say that the infinite is an inaccessible horizon for the finite. This gives us a good explanation as to why feminine enjoyment ultimately has the structure of a fiction: it is a fiction of the inaccessible. From here stems the organic relation between this enjoyment and God. This is precisely where Lacan drops his association with Cantor:

Thus, set theory is designed to restore the status of number. What proves that it does indeed restore it, within the perspective that I have been laying out, is that, setting out as it does the grounding of the One, and making number lean on this as a class of equivalence, set theory thereby manages to highlight what it calls the *non-denumerable*, which is very straightforward, as you are about to see. It's readily accessible, but to translate it into my vocabulary, I call it, no the *non-denumer*

⁵⁰ *Ibid.*, p. 218.

able – an object I would unhesitatingly qualify as mythical – but the *impossible* to denumerate.⁵¹

Lacan takes from set theory what he deems appropriate so he can "advance a new logic" to explain the non-existence of the sexual relationship. But the passage above completely shows his non-axiomatic comprehension of the denumerable. The axioms (of Separation, Power Set, Union, Empty Set, etc.) allow for the construction of the whole numbers. But none of these foregoing axioms are responsible for the construction of the denumerable itself, because the denumerable is not constructible. It exists according to a separate axiom: the Axiom of Infinity – using Lacan's parlance above, ω is readily accessible *axiomatically*. Asserting the status of the denumerable as mythical is what makes Lacan a pre-Cantorian (and in our parlance, pre-disciplinary) in the end: for him (and this is why intuitionism sounds appealing to Lacan), the infinite is ultimately the paradigm of inaccessibility.

The latter point is accentuated by the way Lacan mobilizes Cantor in his treatment of the theory of identification. As we mentioned earlier, Lacan made use of the concept of sets in his Seminar IX, on identification, where he wants to move beyond Freud's general theory of how representations associate themselves through an economy based on the quantity of excitement. At this point, Lacan took advantage of a method different than his usual one. Freud was already able to show that what is significant are associations wired in one's psychic apparatus. In contrast, Lacan wanted to show that, before this can happen, one needs to bring into the psychic economy something that has no signification, which can represent the lack of representation, that is, desire itself. Therefore, the question is: How can one have a representative with no representation? A difference with no signification? The problematic that this approach opens, according to usual philosophical arguments, is that of the representation of nothing. Lacan needed to show that a relation to some unity, which is also not a representation of unification, is thinkable. This was not strictly a psychoanalytical problem, but rather a necessary stepping stone in Lacan's argument. At that moment, Lacan found his solution in Cantor's theory of multiples - because a set provides exactly this minimal measure of unicity without having to unify what it contains. With this step, Lacan mobilized Cantor in the correct sense:

⁵¹ Lacan, ... *or Worse*, p. 124.

mathematics authorized Lacan to continue thinking maximally. From this, he proceeded to develop the concept of a unary trait, as a potentially denumerable set, as an addendum and extension to Freud, and to the existing psychoanalytical theories of the time.

This anecdote shows the positive influence that Lacan received from mathematics, set theory, and axiomatic thought. Here, Lacan does not yet condemn Cantor for having mythical or imaginary commitments. It was not psychoanalysis that was interpreting mathematics (as per Miller), but mathematics that was interpreting psychoanalysis. But there resides another point in this anecdote. We now know that the paradigm that Lacan wanted to move beyond is constructivism, that is, he wanted to move to the paradigm according to which a representation of a set does not have to be necessarily constituted by a representative, or a formula. We also know now that this is only possible by a commitment to the Axiom of Infinity that is deeper than what constructivism could afford. In other words, what Lacan wanted to achieve is possible not just by a commitment to the Axiom of Infinity, but also by a commitment to the genericity of denumerable sets: the movement we have been pursuing from Gödel to Cohen.

This finally takes us to the question crucial to our inquiry: What would it mean for the subject (in the analytical sense a woman) to have a determination that is of the *order* of the infinite, when this *order* is not merely fictitious and inaccessible? Let us see how Badiou answers this question, which summarizes the crux of our endeavor:

Since feminine enjoyment is of the order of the infinite, does it not turn out that, rather than having the structure of a fiction, it has the structure of an axiom? A woman then would, as the condition of her enjoyment, have to decide the inaccessible as regards its existence. This axiomatic character of secondary enjoyment in no way contradicts its unutterable character. Granted, the axiom does state something, but the decision on this statement, the gesture by which it is inscribed are [sic!] not all stated in the axiom itself. The axiom does not express its axiomatic dimension, and so the decision that it is remains tacit. Silently, in the infinite element of her enjoyment, a woman would have decided that with respect to primary or phallic enjoyment there exists an inaccessible point that supplements its effect, and determines her as not-whole with regard to the function Φ . It is properly this silent decision that would forever block the sexual relationship from existing. For, summoned to the place of enjoyment, the position 'man' and the position 'woman' would continue to be separated by that layer (épaisseur) without substance (*épaisseur*) not even of the axiom, but of the axiomatic, and thus instituting, dimension of this axiom.⁵²

What is important about the above *paradigm shift* (or a figure-ground change of perspective)? That the real of thinking – as what was thought of as impossible and impassable – becomes a positive category, from which new possibilities will arise: it is the pass of the real, the real as consistency and as generic.

We can interpret this change of perspective, a disciplinary operator which I call regionalization: this operator lays bare the presuppositions embedded in a certain theoretical edifice. This operator touches upon the themes of beginning, novelty, and interiority – and sits at the center of the theory of discipline. This operator has been utilized by Badiou, time and again: in his debate with Miller regarding the theory of discourse, with Lacan regarding the operation of subjectivation in *Logical Time*,⁵³ regarding the presuppositions of the doctrines of foundation and ground, and finally with regard to the *cogito*, those presuppositions that tie us to an objective determination of the subject. It is therefore fit-ting that we complete our last construction with yet another application of this operator by our master.

If the subject has a determination that is of the order of the infinite, and if we abandon the pre-Cantorian presupposition of the infinite as inaccessible – if we espouse the idea of the infinite as a (or the) positive category of thought (in our time), apropos the Cantorian revolution in mathematics – then this infinite determination does not merely touch upon the real as mythical or mystical, but as generic. The essence of the subject is no longer unreachable, but comprised of an infinite truth. Following our construction of the subject as a non-relational category – subject minus the object – we come to realize that the determination of this subject is infinite, and this determination under the idea of infinity and axiomatic thought is nothing but an infinite truth.

⁵² Badiou, *Conditions*, p. 211.

⁵³ See "Subjectivizing anticipation, retroaction of the subjective process", in Badiou, *Theory of the Subject*, pp. 248–253.

If we agree with Badiou that the category of the subject in philosophy has acted as modernity's operator of compossibility – a constant theme that has been present from Descartes (science), to Hegel (politics), to Heidegger (art), and to Lacan (love) – and if the return of philosophy will depend on the reworking of this category after its destitution in the hands of the linguistic turn, then, in my view, this reworking after Badiou must occur through the thought of discipline, in whose center we find the commitment to the maximality of thinking, the idea of infinity and its capacity for regionalization.

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