

## **Badiou's Materialist Reinvention of the Kantian Subject**

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**Abstract:**

Quentin Meillassoux has argued against Immanuel Kant's turn to the capacities of a knowing subject, describing this "correlationism" as out of step with science and logic. In contrast, Meillassoux's teacher, Alain Badiou, maintains a deep ambivalence regarding Kant; despite his criticisms of Kant's legacy, Badiou maintains an insistence on subjectivity comparable to Kant's. Through close attention to Badiou's article of 1998, "Kant's Subtractive Ontology," I argue that this troubled inheritance from Kant is necessary for Badiou in order to maintain a logical coherence of appearance following from his mathematical ontology. In particular, Badiou draws our attention to Kant's insistence on relationality in the presentation of objects and argues for a transformation of the role of logic in this combination. By collapsing the distinction between general and transcendental logic Badiou obtains a direct engagement between thought and reality. However, this ontology nonetheless retains the necessity of an impersonal subject in order to uphold consistency of relationality and to provide for the possibility of change. I compare Badiou's reading of Kant, partly inflected by Martin Heidegger's, to Georg Lukács' prior attempt to reconcile Kant with dialectical materialism. Avoiding Heidegger's aesthetic reconciliation, both Lukács and Badiou insist on the active capacities of the subject. We might conclude that Kant is necessary to establish Badiou's particular conception of materiality and truth.

**Badiou between Meillassoux and Kant**

In his work *After Finitude*, Quentin Meillassoux argues that a correlationist philosophy, according to which truth is verified by agreement between mind and world, can be replaced by a more direct and immediate description of materiality as it is. Meillassoux argues for his teacher Alain Badiou's mathematical ontology as a replacement for Immanuel Kant's turn to the capacities of the knowing subject (Meillassoux 2008: 26). In contrast, Badiou maintains an insistence on subjectivity in acceding to truth, to such a degree that Gilles Deleuze accused Badiou of neo-Kantianism in their private correspondence (Badiou 2000: 99). We should reconsider Badiou's approach to Kant with this in mind, in particular with regard to the relationship between transcendental idealism and materialism. As Peter Hallward argues, in "many ways Badiou's theory of the subject resembles Kant's rationalist voluntarism more than it does either Hegel's account of spirit or Marx's account of class" (Hallward 2000: 129). While Badiou argues for his own greater proximity to dialectics, I argue that Badiou's more measured account of Kant is what distinguishes him from Meillassoux's speculative materialism. This inheritance of Kant's subjectivity, rather than dismissing it as an outdated correlationism, is paradoxically necessary in order to establish his reinvigoration of dialectical materialism.

Badiou's commitment to the revolutionary Marxist tradition might suggest a comparison to a prior materialist approach to Kant, attempted by Georg Lukács. Lukács argues that Kant's Copernican operation is to examine the knowing subject and its ability to cognize the world on the basis of *a priori* synthetic judgments supported by logic and the discoveries of mathematics and physics (Lukács 1971: 126). As a result there is an essential scientism to Kant's work that

takes Euclid and Newton for granted as the architects of necessary laws. Badiou agrees that Kant limits his inquiries according to the protocols of outdated sciences, but also argues that prior to this, the more radical problem with Kant's epistemology is a reliance on Aristotelian logic. In Badiou's view, attention to a contemporary revolution in logic can close the gap between Kant's notion of a transcendental logic depending on the critical project, on the one hand, and the resulting laws of conventional logic on the other. This has the consequence of replacing Kant's critical idealism with a formal ontology. We ought to examine whether this mathematical ontology might suggest a more solid basis for practical engagement. In other words, we might see Lukács and Badiou as the two fullest exemplars of a dialectical materialism that necessarily traverses Kant; the former emphasizes human freedom and practice, while the latter reinvents logic and mathematics.

### **Subtractive Ontology**

Kant is generally read as dismissing ontology in favor of the epistemology of an implicitly human subject. However, Badiou, following Martin Heidegger, reads Kant as practicing a "subtractive ontology" similar to his own (Badiou, "Kant's Subtractive Ontology" in Badiou 2004: 135). Heidegger portrays the first critique "as a laying of the ground for metaphysics and thus of placing the problem of metaphysics before us as fundamental ontology" (Heidegger 1990, 1). In Heidegger's view, then, Kant's critique succeeds in raising the question of what ontology could possibly provide for the perception of the human subject. This requires a fundamental ontology, "the metaphysics of human Dasein which is required for metaphysics to be made possible" (Heidegger 1990: 1). That is, traditional metaphysics, from Plato to Leibniz, failed to raise the question of what could allow for the production of these very metaphysical judgments. Kant begins the inquiry into this ontological regress. This is of epochal

significance for Heidegger, because “what makes the comporting toward beings (ontic knowledge) possible is the preliminary understanding of the constitution of Being, ontological knowledge” (Heidegger 1990: 7). Kant’s turn to the subject raises the question of Being, of what orientation would be necessary to apprehend the being of other beings, in a radically novel way. Further, this calls into question the identification of metaphysics with positive or scientific knowledge. Metaphysics, then, cannot be located in the world as it is observed, but rather must be considered as an intrinsic property of a knowing subject. This is why Heidegger declares that with Kant, ontology “becomes a problem for the first time” (Heidegger 1990: 8).

This insistence on the ontological terrain rather than the epistemological allows Badiou to bypass Lukács’ humanism in favor of an enlarged attention to questions of science, understood to impel rather than limit revolutionary praxis. Whether Kant has any ontology at all is controversial; Badiou argues that Kant presents the conditions of a minimal ontology by means of his transcendental object = X. Badiou reconsiders the relationship of logic, mathematics, the subject and ontology in order to establish an altered understanding of the relationship between mathematics and being in a manner that he argues can better equip Marxist praxis. According to Heidegger, Kant’s real concern, for which ontology is only a necessary afterthought, is to provide a metaphysical certainty for the possibility of a priori synthetic judgments (Heidegger, 1990, 9). Ontology, properly examined as a primary consideration, is limited to the necessities of the certainty of potential sensible experience, as sorted out by the categories. Badiou identifies the character of these judgments with a specific historical valence, “those universally acknowledged bindings which he believes to be operative in Euclidean mathematics or Newtonian physics” (Badiou 2004: 137). This eighteenth-century conception of science, for Badiou, results in a historically bound and essentially stunted conception of the nature of Being.

This has the consequences of limiting the existence of the one to the needs of combination, limiting consistency to the relational nature of the manifold, and subordinating the structure of presentation to representation (Badiou 2004: 137). Badiou seems to define the Kantian object as a distinguishable entity, about which statements can be made with certainty, according to the precepts of Euclid and Newton, but ultimately existing according to the pre-existent unity of originary apperception. This object and the scientific conditions of knowledge about that object determine the possibilities of the very transcendent conditions that allow for Being in the first place. Badiou describes Kantian ontology as one that “labours beneath the shade of its inception in the pure logic of cognition”; that is to say, statements with bearing on being *qua* being are only made insofar as they are necessary to provide for the cognition of objects according to the logical form of the categories (Badiou 2004: 137). Kant is famous for making no certain declarations about being *qua* being, this being the noumenal world of things in themselves, but Heidegger’s argument points to Kant’s requirement that any being judged sufficient to be presented epistemologically, and hence ‘ontological’ to the perspective of a human subject, would obey the abstract logical demands of its inception. Put another way, Kant subordinates the ontological problem of the question of presentative consistency to the epistemological problem of criticism rooted in the capacities of the knowing subject (Badiou 2004: 137).

The object, for Badiou, is simply a equivocation, “one that corresponds to that other typically Kantian equivocation, which ascribes both the supreme function of unity – originary apperception – and the categorial function of binding [combination] to the single term ‘understanding’” (Badiou 2004: 138). For Badiou, when Kant makes the power of understanding responsible for both the combination of the manifold and the primary conditions for the existence of that manifold, he has failed to fully account for

the disjunction between ontology and epistemology. This very break between the two, insisted upon by Badiou as present in Kant's own work, must be denied, paradoxically, in order to uphold Kant's division between noumenal and phenomenal aspects. Were ontology granted autonomy and existence outside the power of the understanding, it would become the foundation of a pre-critical metaphysics without the limits imposed by the finite, apparently human, subject. Kant's emphasis on the understanding only "weakens the radical distinction [...] between the origin of the one and the origin of relation" (Badiou 2004: 138). Kant splits the one, which is equal to being *qua* being, to ontology, and to metaphysics, from relation, the categories, and the conditions of phenomenal representation, but he bridges this gap through a reliance on the subject's power of imagination.

### ***A Priori* Recognition of Objects**

Badiou declares that for Kant, both the subject and the object must be split into two. With regards to the object – Kant is aware that whatever claims can be made about the object on Newtonian or Euclidean grounds – "what is left undetermined by the object is the 'being of the object', its objectivity, the pure 'something in general = X' that provides a basis for the being of binding [combination] without that X itself ever being presented or bound" (Badiou 2004: 138). As Heidegger puts it, "in order to be able to encounter this being as the being it is, it must already be 'recognized' generally and in advance as a being, i.e., with respect to the constitution of its Being" (Heidegger 1990: 47). This 'being of the object' cannot be fully imagined under the conditions of representation by the categories or thought through a schema based on relation. The transcendental object = X appears to be just on the verge of ontology. As Henry E. Allison points out, "there are places in which Kant seems to identify the transcendental object and the thing as it is in itself, including one (A366) where he does so explicitly, while there are others in which the two must be sharply distinguished" (Allison 2004: 60). For this

reason, Heidegger and Badiou view the transcendental object as a borderline concept between the phenomenal and the noumenal.

Badiou reads the transcendental object = X as corresponding to the transcendental subject apparent in originary apperception (Badiou 2004: 139). While the transcendental subject is the originary ground for all perception and all judgments, the transcendental object = X lays the basic conditions for any object that could be perceived. Heidegger had already indicated an ontological bond between these contentless existences; ontology must account for “the condition for the possibility that in general something like a being can itself stand in opposition to a finite creature” (Heidegger 1990: 47). It is this ‘something like a being’ and this ‘finite creature’ which the transcendental object = X and the essence providing for originary apperception, respectively. Both these aspects are split from their phenomenal counterparts, the empirical subject and represented intuition.

The transcendental object = X, while in a sense corresponding to an ontological consideration of being as such, is only imagined as “*the general concept of consistency for all possible bound [combined] objectivity*” (Badiou 2004: 139). Kant posits that his originary and empty “transcendental object = X” guarantees that any given content will enter into a realm governed by relational, logical, and categorial limitations. Again, an ontological question is glimpsed through eyes open wide just enough to admit a guarantee for the certainty of logical judgments. Only objects under Aristotelian, Euclidean, and Newton patronage will exist, because the conditions of existence are the submission to those laws. These are the aspects which Badiou will criticize, leaving only the most abstract and ontological aspects of originary apperception and the transcendental object = X. This is part of a broad general strategy of pushing Kant's more metaphysical judgments a step further than he would be willing to take them; Kant's

transcendental object = X is a limit-condition for any possible perceived object, with epistemological bearings. However, the erasure of the distinction between the noumenal and phenomenal realms renders the transcendental object=X an ontological mechanism.

For Badiou, originary apperception and the transcendental object = X are a “transcendental proto-subject” and a “transcendental proto-object,” respectively (Badiou 2004: 139). Originary apperception provides for the possibility of a subject even if one were absent; the empty variable X provides for the possibility of a given object even when we choose to observe nothing at all. As Heidegger contends, both of these are radical nothings which cannot be filled by content; “it is not knowable because it simply cannot become a possible object of knowing, i.e., the possession of a knowledge of beings. It can never become such because it is a Nothing” (Heidegger 1990: 83). It is a Nothing which performs the role of delimiting the horizon of the “rough sizing up of all possible objects,” making this Nothing a foundation for Something (Heidegger 1990: 84). Both the subject and the object, in their origins, are then nothing, “the void withdrawn from being, for which all we have are names” (Badiou 2004: 139). These two nothings are specific sorts of ontological considerations, insofar as they are already conditioned by the rules necessary in order to govern epistemology in the historical moment of the completion of the eighteenth century. However, Badiou admires Kant for positing two minimal, in fact non-existent, metaphysical entities as preconditions for the existence of anything at all and the perception of that anything. Badiou terms this an ontology, a “subtractive radicality,” which “culminates in grounding representation in the relation between an empty logical subject and an object that is nothing” (Badiou 2004: 139). In contrast to Lukács, Badiou argues that the recourse to man’s essence is unnecessary. While Lukács argues that it is man’s transformative capacity to work and to struggle is essential, Badiou avoids a humanist reading of Kant entirely. Praising Kant’s “refusal to concede

anything to the aesthetic prestige of the ontologies of presence,” Badiou sees this as a beginning for his own notion of ontology as equivalent to contemporary mathematics (Badiou 2004: 140).

On this point, Badiou quarrels with Heidegger over Kant’s ontological direction. Heidegger famously believed that Kant had retreated from the world-making significance of transcendental imagination. Heidegger’s ontology “first awaits the encountered being; and as such awaiting, it makes possible the encountering of objects which show themselves with one another” (Heidegger 1990: 53-54). Heidegger’s objects reveal their essences, unlike Kant’s, because it is the nature of their ontological framework to await a Being capable of raising the question of its own being (Kant 1998: B83). This possibility is provided for by transcendental apperception, here equivalent to Dasein, but structurally united with “the pure power of imagination” (Heidegger, 1990, 54). It is for Heidegger the transcendental power of imagination, relative to time, which provides for the grounding of the power of understanding (Heidegger 1990: 57). This understanding, as we recall, provided for the act of combination that allows for perception. However, further, “it must at least remain open as to whether this ‘creative’ knowledge, which is always only ontological and never ontic, burst the finitude of transcendence asunder, or whether it does not just plant the finite ‘subject’ in its authentic finitude” (Heidegger 1990: 84). In this declaration, Heidegger identifies the faculty of imagination with ontological knowledge itself, containing the ambiguity of eternity or death within itself.

Like Lukács, Badiou rejects the emphasis on imagination and aesthetic creation as the outcome of the critical project. Badiou rejects a reliance on any third term governing the relation between autonomous spheres. Heidegger characterizes the transcendental power of the imagination as the “root of the essence of man,” this being the problem of existence, from which Kant shrank (Heidegger 1990: 110).

Badiou opposes the finitude upon which Heidegger locates transcendence, but even more so an inquiry which begins with a determination of man's essence. Badiou has sharply criticized Kant's reliance on the power of understanding in reconciling relation and unity. He sees no reason to emphasize another subjective faculty in weakening the division between an empty subject and a hypothesized object. Instead, Badiou argues that this recourse to man's essence is unnecessary. While Heidegger considers man's essence to be a power of imagination raising the question of Being, and Lukács argues that it is instead the transformative capacity to work and to struggle, Badiou avoids the humanist turn in the reading of Kant entirely.

Praising Kant's "refusal to concede anything to the aesthetic prestige of the ontologies of presence," Badiou sees this as a beginning for his own notion of ontology as equivalent to contemporary mathematics and separate from language, poetry, and aesthetics (Badiou 2004: 140). Heidegger's championing of transcendental imagination, which governs interpreting, reading, and spelling leads in the direction of hermeneutics in twentieth-century thought. Badiou's attempt to avoid this path, to oppose the inhuman capacities of mathematics to the expressive powers of poetry and language, leads him to defend Kant's failure to extend the primacy of the imagination.

### **Aristotle's Obsolescence**

Kant believes formal logic as codified by Aristotle to be eternal and universal. As Kant writes in the preface to the second edition: that "from the earliest times **logic** has traveled this secure course can be seen from the fact that since the time of Aristotle it has not had to go a single step backwards" (Kant 1998: Bviii). What's more, "until now it has also been unable to take a single step forward, and therefore seems to all appearances to be finished and complete" (Kant 1998: Bviii). A logic unchanging since

Aristotle remains serene whatever the challenges of psychology, metaphysics, or anthropology, because it is “the science that exhaustively presents and strictly proves nothing but the formal rules of all thinking,” empirical, *a priori*, without regard to object, origin, necessity or contingency (Kant 1998: Bix). Logic is then the one abstracting force that applies both to the transcendent and to the empirical. Kant does separate transcendental logic and general logic in order to avoid wild metaphysical claims, the application of logic to transcendent problems that can only result in antinomies; and does not proceed by means of syllogism. The fact remains that his basic tool of deriving synthesis relies on logic of an Aristotelian heritage.

In contrast, Kant’s mathematics is not formal and cannot be formalized, because it requires temporal intuition in arithmetic and spatial intuition in geometry, thereby rendering it irrelevant to analytic judgments (Kant 1998: B14). While mathematical propositions are pure *a priori* judgments, with binding, apodictic consequences, they fail to exercise any power without the forms of space and time (Kant 1998: B15). Apodictic judgments like those of mathematics, however, are only functions of reason or logic (Kant 1998: A75). Logic, however, is not bound by time or space. Badiou proceeds to historicize logic, first by briefly criticizing Kant’s view of the past (Aristotle’s predicative logic is different from the Stoic’s propositional logic), then by pointing to the enormous dynamism and progress of logic in the past two centuries (Badiou 2004: 164). It is a mathematicized logic, taking the form of Georg Cantor’s set theory, which Badiou attempts to offer as the unique description of ontology.

Having attacked Kant’s faith in Aristotle, Badiou then trains his sights on Heidegger for making exactly the same error. While Kant wishes to champion logic and to locate it in the abstract and formal condition of thinking, Heidegger rewrites philosophy as a forgetting of being, one form of which is the

autonomy of logic. Heidegger's logic is in Badiou's words "the potentially nihilistic sovereignty of a *logos* from which being has withdrawn" (Badiou 2004: 164). Heidegger's logic takes no account of the ontological and is rather an empty and formal framing providing for epistemological validity. This Western ratio contains the potential for an instrumentalism and the failure to consider Being as a question. Heidegger's logic is "the science of thinking, the doctrine of the rules of thinking and the forms of what is thought" (Heidegger 1990: 126). For Heidegger, as for Kant, logic "has taught the same thing since antiquity" (Heidegger 1990: 127).

### **General and Transcendental Logic**

In Badiou's view, Kant's ontology is characterized by a two-tiered understanding of logic. Badiou declares that Kant's distinction between general and transcendental logic is untenable (Badiou 2004: 184). This is an important node in Kant's argument for a dual-aspect theory, as well as establishing the conditions for the cognitions of objects. Empirical data in Kant is the product of empty concepts and blind intuitions; they are pure *a priori*, but to be perceived empirically, must combine the two faculties (Kant 1998: B75/A51). This capacity is performed by the understanding, which must make use of logic. While a particular logic is the organon of a particular science (physics, biology, etc.), general logic is predicative and follows from Aristotelian heritage. General logic, like concepts and intuitions, can be pure or applied; in its pure form, it is abstract and concerns *a priori* principles; under any given empirical conditions, it is applied (Kant 1998: B75/A51).

Transcendental logic, in contrast, does not abstract "from all content of cognition" (Kant 1998: B80/A56). As the name indicates, it is the "origin of our conditions of objects insofar as that cannot be ascribed to the objects"; that is, the conditions providing for the perception of any objects at all in the

first place, be they real or imagined objects (Kant 1998: B80/A56). This type of logic applies, then, to acts of pure thinking, on another level of remove from the *a priori*. This logic does, however, continue to obey the minimal constraint of obeying Aristotelian logic—non-contradiction, causality, and so on. Kant argues that there has always been the temptation to transform transcendental logic into an organon of apparently objective assertions, giving birth to metaphysics from Plato to Christian Wolff (Kant 1998: B86). This is a logic of illusion, a dialectic in which diametrically opposed assertions can be given equal weight, as in the famous antinomies of reason. This excessive use of reason demands Kantian critique, which performs the propaedeutic role of pulling metaphysics away from judgments regarding God and eternity, and re-focuses it on the proper cognition of objects. In contrast, as Hallward puts it, Badiou’s “ontology returns to the classical assertion that thought engages directly with true reality or being” (Hallward 2010: 130). While his thought is classical and resists critique, it maintains a secondary commitment to impersonal subjectivity in order to maintain relationality.

### **Relationality**

Badiou argues that the distinguishing Kantian trait is not his much-vaunted Copernican turn to the subject, but his attention to “the linkages between phenomena, and this constitutive primacy of relation forbids all access to the being of the thing as such” (2004, 135). One might say that in Badiou’s view, Kant’s theory of truth privileges coherence as a means to correspondence. While Kant defines truth as consisting “in the agreement of a cognition with its object,” which is obviously a form of correspondence, Badiou emphasizes the way in which these objects already submit to logic as “the negative touchstone of truth,” settling for a coherentist criterion (Kant 1998: B83). Badiou insists that coherence, ontological obedience to the laws of mathematics, and correspondence are ultimately equivalent. Kant sidesteps this problem by relegating problems of eternity and God to the

transcendental and hence unknowable and unscientific, while continuing to subject them to minimal requirement of Aristotelian coherence. Badiou draws attention to Kant's belief that scientific knowledge is that which be cognized in a manner that allows for knowable relationship. The categories, essential to synthetic perception of objects, are a "conceptual catalogue of every conceivable kind of relation" before they are anything else (Badiou 2004: 135).

These relations are supported by a labor of combination (*Verbindung*), which synthesizes the manifold of phenomena (Badiou, 2004, 135). Badiou finds a key passage in this regard in the *Critique of Pure Reason*: "Combination is the representation of the **synthetic** unity of the manifold. The representation of this unity cannot, therefore, arise from the combination; rather, by being added to the representation of the manifold, it first makes the concept of combination possible" (Kant, 1998, B131). Badiou terms this one of Kant's most bracing moments; Kant's distinction between combination (*Verbindung*) and unity (*Einheit*) provides the original basis for the possibility of relation (2004, 135). This means that the process of binding or combination, the *a priori* act of the understanding which provides for the possibility of synthesis, is secondary to an already existing unity (Kant 1998: B130). As Hallward argues, Badiou maintains the significance of the subject as "logical machinery" in order to cohere appearance (2002, 131).

Combination has a paramount role in perception; "we can represent nothing as combined in the object without having previously combined it ourselves" (Kant 1998: B130). Further, "among all representations **combination** is the only one that is not given through objects but can be executed only by the subject itself [...]" (Kant 1998: B130). Synthesis depends then on this spontaneous faculty of representation without which objects would remain chaotic and unknowable entities. This very faculty,

further, originates in the knowing subject. However, the capacity to produce such judgments necessary to the possibility of perception depends on an action which is originally unitary and universal (Kant 1998: B130). Kant deduces this primary unity of perception, paradoxically, through “the dissolution (**analysis**) that seems to be its opposite” (Kant 1998: B131). The understanding must have presupposed a unity, a lack of differentiation, before it can begin to sort out the nature of distinct objects.

### **Transcendental Apperception**

Badiou posits that it might appear that Kant ascribes this situational integrity to the subject’s capacity to apply the transcendent categories to the undifferentiated mass of intuition (Badiou 2004: 135). In this reading of Kant, the unity of perception would be generated entirely by the acceptance of the primacy of the subject and the validity of the categories. Badiou relies on Kant’s conception of originary unity to determine a more profound Kant, a more ontological Kant, than the Kant of relations and categories. Badiou argues that the primacy of unity to combination indicates that rather than being resolved by the categories, “the problem of how the inconsistent manifold comes to be counted-as-one must have been decided in advance in order for relational synthesis to be possible” (Badiou 2004: 135). This means that the synthetic faculty, the representation of objects by the subject, is merely a “derivative reality of experience” (Badiou 2004: 135). The realization of the unity of experience relegates relation, the activity of the categories, to a secondary position. The object is constituted by judgment, which applies the categories to intuition within the framework of its forms, time and space. However, the categories, intuition, space, time, and the activity of judgment all rely on the unity of apperception, which is the ground that interests Badiou as a philosopher who concerns himself with ontology. Badiou argues for disjunction; the synthetic unity of the manifold is equivalent to the categories, but cannot be identified with “the *one*” (Badiou 2004: 136). The guarantee for this unity is then not guaranteed by the validity of

the categories, but by originary apperception.

Originary apperception functions “as guarantor of consistency and originary structure for all presentation”; combination “characterizes all *representable* structures, in terms of the gap between purely originary apperception (the function of unity) and the system of categories (the function of synthetic binding) within the transcendental activity of the understanding” (Badiou 2004: 136). Combination, through the power of the understanding, allows the subject to cognize intuition through synthesizing it with the logical function of the categories. Originary apperception, on the other hand, provides the necessary pre-existent unity of experience that allows for any judgment to take place. This pre-existent unity, *Einheit*, is for Badiou the ontological moment in Kant, the moment when an accounting for the presentation of being *qua* being, rather than a determination of the conditions for the representation of being as bound by the constraints of logic, takes place.

### **Objects and Logic**

However, this consideration of ontological questions remains distorted by the means of its discovery. While posited as original, Kant deduces the existence of originary apperception only because he finds it necessary as a precondition for solving the problem of relation; that is, he needs it to provide for the certainty of his categories and the reality of synthetic judgments (Badiou 2004: 136). In this, Kant’s means of access to ontology is narrow. Ontology, properly examined as a primary consideration, is limited to the necessities of the certainty of potential sensible experience, as sorted out by the categories. Badiou identifies the character of these judgments with a specific historical valence, “those universally acknowledged bindings which he believes to be operative in Euclidean mathematics or Newtonian physics” (Badiou 2004: 137). This eighteenth-century conception of science, for Badiou, results in a

historically bound and essentially stunted conception of the nature of Being.

Badiou argues for a separate consideration of mathematics and logic, arguing that they are not equivalent. Gottlob Frege attempted to integrate the two and failed, which demonstrates that even an entirely mathematicized logic is incapable of containing mathematics as a whole (Badiou 2004: 165). Ontology (that is, for Badiou, math) prescribes logic. To schematize: Badiou's mathematics is equivalent to ontology that provides for the possibilities of logic that governs the appearance of sensible objects. Kant's objects are presented according to the rules of logic, which is eternal and universal; mathematics is a synthetic judgment that obeys logic; ontology is the existence of an empty original subject and an equally void transcendental object.

Badiou aims to destroy the Kantian focus on the object as much as he wishes to deny the finitude of the subject and to dismiss Aristotle's logic, Euclid's geometry, and Newton's physics. This would appear to leave very little of Kant left and determine Badiou as a militant anti-Kantian. However, Badiou declares that he wishes to salvage two of Kant's procedures: "First, transcendental logic does indeed deal with the 'there is' as such, and is effectively concerned with the relation to objects" (Badiou 2004: 184). Jettisoning its obsolete Aristotelian character, Badiou retains the notion of logic as governing the appearance of objects, though this legislative role remains secondary to the fully ontological significance of mathematics.

Badiou also declares, "there is no cognitive origin of any sort here, nor any empirical origin" (Badiou 2004: 184). Kant's cognition also relies on empirical sense-data. Badiou de-emphasizes this in order to draw attention to what remains metaphysical in Kant, the abstract grounds for potential cognition. This

is the subtractive dimension of Kant, the two voids, that moment in Kant that begins to speak of a non-existent hypothesized object and an empty subject. With regards to the subject, this places Badiou closer to Kant than to a psychological account of knowledge. Badiou's conception of a political subject relies on a chance encounter with a truth-process, in which the status of subjectivity is indifferent to the empirical characteristics of the person engaged in such a pursuit; truth is always attendant to its subject. This is equivalent to Kant's notion of the subject, for which empirical internal perception offers "no standing or abiding self in this stream of inner appearances" (Kant 1998: A107). With regard to the object, Badiou declares that "We too are dealing with the object =  $X$ " (Badiou 2004: 184). However, Badiou's object =  $X$ , formulated as it is through post-Cantorian set theory, does not submit to Aristotelian criteria; nor does it function as a limit to the horizon of epistemological knowledge, but rather as an ontological grounding. For this reason, Badiou's proletarian subject is sharply distinguished from its empirical appearance as embodied or acculturated, and he claims Kant as an antecedent thinker of this impersonality.

### **Lukács and the Dialectical Materialist Reading of Kant**

We might compare this position to a previous attempt to reconcile Kant with dialectical materialism. For Lukács, a dialectical relationship with the illogical grounds human freedom and enables praxis. In contrast, for Badiou, the noumenal vanishes in favor of an understanding of the world as transcendently logical, not according to Aristotle's logic, but instead as described by contemporary mathematics. This appreciation of "inhuman" logic, rather than undercutting the possibility of human action, allows for the distinction between proletariat as revolutionary subject rather than simply a sociological, cultural, or psychological phenomenon. From this point of view, the escape from what Lukács names "reification," the naturalization of artificial effects of power and domination, is provided

by attention to the possibilities of logical reasoning rather than their overcoming in human freedom (Lukács 1971: 110-111). Further, this freedom takes the form of a correspondence between the calculations of thought and the exterior logic of the world. For Badiou, appreciation of an alteration in the nature of the connection between the mind and logical consistency provides the basis for subjective action that overcomes bourgeois humanism.

We should then ask how this mathematical ontology can ground a materialist understanding and action. In considering this question, Zachary Luke Fraser draws attention to Badiou's emphasis on the act of formalization. Rather than a passive discovery, this requires a seizing of truth from the inertia of the world: "It is in this sense that, in a strange but discernible Marxian fidelity, Badiou seizes upon formalization as the royal road to materialism—it produces 'the thing' as pure act, captured in 'the naked force of the letter', and dissolved in the insubstantial univocity through which mathematics renders itself the science of being" (Fraser 2007: xiv). In other words, in Badiou's conception, thought itself (in its rigorous mathematicization of logic) is not irreducibly split from the outside world, as it is in Kant, nor does it need to be discarded in favor of human labor, as it in Lukács. Instead, this type of thinking is itself a form of transformative and productive action. However, we still must answer the question of how this particular mode of ontological understanding supports a Marxist conception of praxis on behalf of a proletarian class.

We might question, then, whether Badiou's fidelity to V. I. Lenin demands a greater proximity to Lukács than to Meillassoux. As Alberto Toscano puts it, "what prevents the kind of idealist pluralism according to which any site and any subject, unbound from the requirements of transitivity with an ordered and ontologically grounded social structure, can be the locus of emancipation?" (Toscano 2008: 543).

Badiou is often associated with a post-Marxist position of “pure politics” according to which economic relations and class-consciousness are secondary to the activity of a subject that demands political equality (Žižek 2005: 55-56). Indeed, Žižek argues that this insurrectionary subject is transcendently Kantian rather than truly dialectical (Žižek 2002: lxxxiv-lxxxv). However, in his untranslated work of 1985, *Peut-on penser la politique?*, Badiou argues that an egalitarian politics depends on mobilization from a site of domination and exclusion from representation in political power, and this will necessarily involve the factory as a locus of political change (81-82). There is some difficulty in determining why it is necessarily the factory, rather a refugee camp, for example, that is so essential if the economic referent is discarded, as Badiou is tempted to do. For this reason, I agree with Alberto Toscano that it is incumbent on a contemporary critical Marxism to “combine the immediate politicisation of exploitation that characterises Marx’s own work with some of the metaontological and metapolitical tools” found in Badiou (Toscano, 2008, 548). Badiou himself indicates, in one of the lectures included in Badiou’s *Theory of the Subject*, given in 1977, that the proletariat must be considered as worker initially before it can be purified or abstracted (2009, 130-131). Badiou’s insistence on the position of subjectivity allows for a proletarian commitment comparable to Lukács’, absent from Meillassoux.

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