

Adrian Johnston, "Points of Forced Freedom: Eleven (More) Theses on Materialism"

I. Against the Purism of Anti-Naturalist Formalism

Any materialism worthy of the name must involve elements of both naturalism and empiricism. However, it need not be straightforwardly and entirely naturalist or empiricist in the traditional (particularly pre-Kantian) senses of these labels (and, in the case of materialisms in the wake of German idealism, including transcendental materialism, ought not to be). Following from this, any anti-naturalist rationalism, in whatever guise, cannot qualify as being simultaneously a materialism too. Although an anti-naturalist rationalism can be made consistent with (metaphysical) realism, this by no means renders it compatible with materialism strictly speaking. In still other words, there is no such thing as a purely formalist materialism; with reference to the birth of modern science, there is no Galileo without Bacon too. Both aversion to the experimental natural sciences of modernity as well as rejection of tying knowledge primarily to empirical routes of acquisition prompts thinking down paths leading to anachronistic Pythagoreanisms, ontological dualisms, spiritualist idealisms, religious mysticisms, and an unruly, proliferating swarm of confabulations, delusions, imaginings, fantasies, and ravings passing themselves off as rigorous, responsible philosophizing. Furthermore, insofar as an empirically informed, quasi-naturalist materialism is not in the least synonymous with and equivalent to rigid, mechanical determinism, an attuned materialist sensitivity to the natural sciences is not to be feared as the opening up to the immediate closing down of space for autonomous subjectivity and everything it brings with it.

II. *The Empirical Conditioning of the Non-Empirical*

In terms of the relationship between non-empirical philosophy (as *apriori* thinking) and empirical areas of inquiry (as *aposteriori* knowing), over two thousand years of history has shown a fundamental unevenness to hold sway in this rapport. The historical unfolding of various embodiments of thinking and knowing has revealed that the distinction between the empirical and the non-empirical is, for the most part, a distinction internal to the empirical itself (to put this in a Hegelian fashion). By general consensus at least, the passage of slightly less time was sufficient for Kant to conclude that numerous efforts, scattered across history from ancient Greece to Enlightenment Europe, at gaining privileged metaphysical insight into transcendent ontological realities in and of themselves were always intrinsically vain. The “Transcendental Dialectic” of the *Critique of Pure Reason*, revealing the precise contours of the dialectical deadlocks forever dooming in advance each and every classical metaphysics to futility, extracts its critical logics from the evidence furnished by two thousand years of philosophical history.

Likewise, two hundred more years’ worth of evidence than Kant had at his disposal reveals a pattern according to which developments at empirical levels repeatedly force the redrawing of the very boundary line distinguishing between empirical and non-empirical explanatory jurisdictions. Although a dizzying array of forces and factors have contributed to this historical process—the history of human knowledge is inseparable from the incredibly rich tapestry of human history *tout court*—the birth of modern science with Bacon and Galileo at the start of the seventeenth century added a potent new

accelerant to the transformation of philosophy in and through its relations with other methods and fields of investigation. *A posteriori* experimental sciences have shown themselves more and more capable of laying legitimate claims to questions and problems which, prior to these claims, appeared to be the *apriori* theoretical issues to be raised and resolved by philosophers alone. Nevertheless, this is not to refuse acknowledging that many of these empirical developments are, to a large extent, branchings off from philosophy and its history (i.e., initially intra-philosophical matters subsequently becoming more-than-philosophical fields unto themselves).

Acknowledging and accepting the preceding is not tantamount to a deplorable scientific demotion of philosophy from the heights of extreme hubris, as the queen of the sciences, to the depths of equally extreme humility, as their handmaiden. A recognition of and reconciliation with the historically manifest unevenness in which the empirical has the initiative in shaping and reshaping the borders between itself and the non-empirical is not a surrendering of the rights of philosophy; this is not even a concession that such shaping and reshaping ever is, could, or should be wholly and completely decided exclusively from the side of the empirical, which itself never is purely empirical anyway. Philosophy remains called to exercise its inalienable obligations to: one, critically posit and evaluate the more-than-empirical presuppositions behind the sciences; two, facilitate and partially structure discussions between the sciences; and, three, theoretically explore extrapolations from present states of interaction between philosophy and the sciences beyond the present to the benefit of all disciplines concerned. The multiple relations between the empirical and the non-empirical are not to be predetermined, but, rather, to

be left open to ongoing negotiations informed by appropriate dialectical-speculative sensibilities (or, in Leninist terms, concrete analyses of concrete situations).

III. *Kantian and Hegelian Points of No Return*

The “Copernican revolution” of Kant’s critical-transcendental turn in the late eighteenth century marks a point of no return, a breaking of the history of philosophy, and theoretical speculation in general, in two (to phrase this in a Nietzschean style).

Anachronistic attempts to regress back behind this momentous rupture are fated from their inception to intellectual bankruptcy, amounting to sheer dogmatisms condemned from the outset to self-wrought dialectical ruin through entanglement in the strangling webs of insoluble pre-critical contradictions (and this regardless of the irony here of denouncing dogmatism in the context of bluntly asserting a series of theses—these theses arguably can be defended on non-dogmatic grounds). For instance, fashionable contemporary efforts to break with Kant through reviving the sorts of substance metaphysics indulged in on the European Continent during the seventeenth century (especially Spinozism) succeed only at re-imprisoning philosophy in an enclosed arena (i.e., Kant’s *Kampfplatz*) of interminable, unproductive clashes between a limitlessly multiplying proliferation of foot-stamping, fist-banging combatants forever unable to vanquish each other. These amount merely to reactive, regressive, and impotent outbursts against Kantianism.

This is not for the slightest moment to say that Kantian transcendental idealism is the unsurpassable pinnacle of the history of philosophy. However, it indeed is to say that

the lone truly viable path beyond Kant runs through him, that one cannot pass beyond Kant simply by trying to bypass him altogether. One of the many crucial lessons of the German idealist explosion ignited by Kantian philosophy and the controversies surrounding it is that an immanent critique of transcendental idealism is the real way toward a non-dogmatic overcoming of Kant's subjectivism and his intertwined oppositions to both materialism and a robust realism.

Similarly, just as no philosophically plausible resurrection and revitalization of pre-Kantian speculation is possible, so too is no innocent return to a pre-Hegelian Kant a palatable, compelling option either. Like the critical revolution, Hegel's Kant critique, as inaugurating a post-Kantian trajectory in and through Kantian philosophy itself, ultimately cannot be ignored or circumvented. This critique includes demonstrations of: the dogmatic *qua* non-critical presuppositions of ostensibly critical investigations into thinking subjectivity (especially at the levels of a philosophical anthropology and psychology as well as the reliance upon a very traditional textbook logic in the "Transcendental Analytic"); the dialectically auto-deconstructing operation of the figure of the limit relied upon in distinguishing between noumena and phenomena; and, the inconsistency-ridden nullity of the infamous thing-in-itself. Not only must a realist, quasi-naturalist materialism be non-dogmatic *qua* post-, instead of pre-, critical, arrived at through immanently, rather than externally, criticizing transcendental idealism—it also has to reckon with the formidable legacy of the speculative dialectics of Hegelian "absolute idealism."

IV. *Actively Forgetting Romantic Piety and Heideggerianism*

Despite the noticeable clustering of references above around the end of the eighteenth and beginning of the nineteenth century in the German-speaking world, transcendental materialism, like the historical and dialectical materialisms of which it is a twenty-first century extension, is decidedly anti-Romantic, anti-Pietist, and anti-Luddite (animosities gladly and gratefully inherited from both Hegel and the Marxist tradition). As is well known, Romanticism and Pietism, sharing with each other questionable tastes for the ineffable and the private, are convergent, overlapping influences in the intellectual milieus enveloping Kant and his idealists contemporaries and successors. Unfortunately, these religious and pseudo-secular irrationalisms continue to cast long shadows encroaching on the present, despite being so much *Sturm und Drang* signifying nothing.

Nowadays, such religiously tinged Romanticism is epitomized by various flavors of backward-looking Heideggerianism, with their reactionary fixations on and preoccupations with supposedly “spiritual” crises allegedly expressing a need for anti-scientific reenchantments and resacralizations. These are dangerously distracting misdiagnoses. However loose and indirect, the associations between (neo-)Romanticism and the Right, up to and including fascism, are no historical coincidences or accidents. Both philosophically and politically and from the eighteenth century through today, these pernicious obscurantisms tracing their roots back to the stagnant atmosphere of the Protestantism of the Holy Roman Empire have been and will remain lamentable intellectual disasters. One of several combative slogans for any contemporary materialism indebted to Hegel, Marx, Freud, and Lacan, among others, is, “Forget

Heidegger!” At a more theoretical than immediately practical level, this entails refusing to construe ontology along the lines of Heideggerian ontological difference. This insufficiently dialectical, too neat-and-clean distinction between the ontological and ontic leads straight to a fundamental(ist) obfuscation of actual material existences both natural-*qua*-non-human and non-natural-*qua*-human as well as obfuscating spiritualist pseudo-explanations of historical structures and dynamics on the basis of a divinely opaque Being-with-a-capital-B.

Like the Romantics and Pietists before them, numerous post-idealists in the nineteenth and twentieth centuries end up promoting a facile mysticism whose basic underlying logic is difficult to distinguish from that of negative theology. The unchanging skeletal template is this: There is a given “x”; This “x” cannot be rationally and discursively captured at the level of any categories, concepts, predicates, properties, etc.; Yet, nevertheless, the only true task of authentic thought is to circle endlessly around this sacred void of ineffability, repeating *ad infinitum* (and *ad nauseum*) the admittedly vain, futile gesture of grasping at the purportedly ungraspable. The names of this empty “x” vary while the pattern stays constant: Will, Life, Power, Temporality, Being, Other, Flesh, Difference, Trauma, and so on (up to even certain pseudo-Lacanian versions of the Real). Not only is this boringly predictable negative theological cookie cutter an all-too-easily grasped conceptual scheme of its own—even if one were totally to concede the truth of one or more of these ineffabilities as they are held up by their numerous enthusiastic advocates, there is so much more of greater interest and urgency

for thinking to do than to remain absorbed in the sedentary meditative exercise of fixedly staring into a dark abyss.

V. The Latest System-Program of German Idealism

For a materialism both, one, standing on the shoulders of Kant, Hegel, Marx, and Freud and, two, being neither determinist, mechanical, reductive, nor eliminative, its materialist ontology must be reverse-engineered starting from a theory of subjectivity. In the spirit of Marx's 1845 diagnosis of the shortcomings of purely "contemplative" materialisms from the Ancients through Feuerbach in the first of the eleven "Theses on Feuerbach"—whether Marx realizes it or not, this diagnosis is a permutation of Hegel's injunction to render substance also as subject—more-than-material/natural subjects must be conceived of as simultaneously immanent to asubjective material/natural existences (i.e., substances, to stick to Hegel's wording). From a post-critical perspective, subjectivity is transcendental as a condition of possibility not only for any materialism itself as a theoretical apparatus, but for philosophy and thinking in general. An escape from the mental confines of subjectively idealist variants of transcendentalism, if carried out in a philosophically defensible manner, must set off from inside these very confines (or, as Meillassoux has it, anti-realist "correlationism," whose foundations are laid by Kant's transcendental idealism, must be undone from within). The "inside job" of an immanent critique of subjectively idealist transcendentalism is the lone road leading to a non-dogmatic, rationally justifiable materialist and realist meta-transcendentalism delineating the substantial possibility conditions for transcendental subjectivity itself.

This results in a metaphysics (*qua* systematically integrated epistemology and ontology) of the transcendental subject interlinked with a corresponding ontology of meta-transcendental substance. The subject of transcendental materialism is, in addition to being transcendental in the standard sense, transcendent specifically as a transcendence-in-immanence in relation to the Real of material being(s). With reference to the 1796 “Earliest System-Program of German Idealism” (written in Hegel’s hand but perhaps originally penned by Hölderlin), transcendental materialism puts itself forward as the latest system-program of German idealism, namely, as a new “Spinozism of freedom” *qua* (quasi-)naturalist ontology of denaturalized autonomous subjects. This materialism is a heterodox reactivation of this Tübingen-born agenda in the aftermath of the Darwin-event and the emerging age of the anthropocene.

VI. *The Centrality of Biology for a Materialist Theory of Subjects*

The scientific bridge of choice for a post-Hegelian materialist account of transcendent(al) subjectivity as arising from and remaining immanent to physical substance must be biological. The transition from Hegel’s *Philosophy of Nature* to his *Philosophy of Mind* and the philosophical anthropology and psychology of the latter already tacitly support this privileging of biology. In Darwin’s wake (and despite Hegel’s hasty rejection of certain precursors of Darwin’s views), evolution and genetics, among other areas of biology, must be integral components of such a more-than-empirical materialism simultaneously not without (*à la* Lacan’s *pas sans*) its crucial conditioning connections to things empirical.

The two main alternatives to relying on the life sciences in bridging the gap between substance and subject are differently but equally problematic. On the one hand, a purely philosophical *apriori* eschewing of the *aposteriori* natural sciences as at all relevant to such a synthesized materialist ontology and theory of irreducible subjectivity can furnish merely, at best, suggestive hypothetical guesses or, at worst, dogmatic flights of baseless imaginative fancy. On the other hand, the gesture of tethering such a materialism to scientific domains above or below the scale of biology (i.e., to sciences other than the life sciences) brings with it the imminent danger of endorsing, if only inadvertently, mechanistic, reductive, or eliminative materialist worldviews leaving no real clearing for the autonomous negativity embodied by minded human subjects.

Protests that appeals to the physics of the extremely small, such as quantum mechanics or string theory, do not reintroduce classically determinist materialisms are unconvincing; two reasons for doubt are that, first, it is not evident that the weird dynamics of quantum processes, however weird, entail anything on the order of subjective autonomy and, second, the alleged relevance of such tiny processes to the much larger-scale objects and occurrences of human beings and their existences is a matter of empirically unverifiable faith in the ultimate physical unity and causal cohesion of multiple strata and tiers of material beings. Related to this second reason for skepticism, a non-reductive materialism wishing to advocate a theory of strongly emergent subjectivity actually contradicts itself if it posits substantial continuities between the physics of the microcosmic and biology as dealing with significantly bigger entities. Such a materialism should not follow in Penrose's footsteps.

Moreover, speculations and explorations above and below the bandwidth of the spatial and temporal scale-thresholds of the life sciences are best left, at least as of the recent past up through the present, to such scientific disciplines as cosmology, astrophysics, quantum mechanics, string theory, and the like. That is to say, as regards both the unimaginably large and the just as unimaginably small, theoretical musings entirely disconnected from anything and everything empirical are a poor substitute for the much more careful, guided, and constrained theorizations launched from the platform provided by these disciplines (even string theory, despite debates about whether it [yet] counts as scientific strictly speaking, is extrapolated quite precisely from results, questions, and problems in experimental physical science). In other words, when it comes to entities and events much bigger and much smaller than human mid-sized reality, the historical time of armchair philosophical legislating is long over. Again, absolutely non-empirical musings about these realms amount to fruitless fantasizing.

VII. *The Principle of No Illusions*

For transcendental materialism, there are, so to speak, no illusions. More precisely, this variant of materialism refuses to dismiss all things subjective as epiphenomenal, namely, as purely illusory *qua* causally inefficacious. Hegel's emphasis on the need to think substance also as subject reciprocally entails the complementary obligation to conceptualize subject as substance. This reciprocity reflects his post-Spinozist (in both senses of the qualifier "post-") immanentism in which transcendent(al) subjectivity nonetheless remains immanent to substance in a dialectical-speculative relationship of an

“identity of identity and difference.” Thinking subject as substance, which is a move central to transcendental materialism, involves treating subjectivity and various phenomena tied up with it as “real abstractions”—a Marxian notion foreshadowed by Hegel and redeployed by the Lacan who famously rebuts a piece of popular May ’68 Parisian graffiti by insisting that, “Structures indeed do march in the streets,” that they “have legs” (perhaps connected to the feet of Marx’s marching history). As real *qua* non-illusory, such abstractions are causally efficacious and, hence, far from epiphenomenal. In Hegelian phrasing, the thought of the concrete apart from the abstract is itself the height of abstraction.

Additionally, conceiving subjectivity as substantial, as internal in its irreducibility to the asubjective grounds of its very being, requires rejecting any strictly contemplative materialism (be it mechanical, reductive, or eliminative). Apart from the profound epistemological inadequacies of the contemplative standpoint—as per Hegel’s and Schelling’s Spinoza critiques and Marx’s Feuerbach critique, the contemplators fails to ask and answer crucial, unavoidable questions about how or why what they contemplate itself ever gave rise to contemplation (theirs included) to begin with—it is ontologically unsatisfactory too. If subjects, including contemplative ones, are fully immanent to the ontological register of substances, then an ontology that implicitly or explicitly excludes them necessarily is incomplete. This deficiency is especially galling in that it amounts to the glaring absence of an explanation regarding the causes for asubjective being itself generating, among many other effects, any and every ontology as a reflexive subjective

reflection on (and in) this very same asubjective being. Paraphrasing Marx, one might ask: Who will contemplate the contemplators?

VIII. *The Principle of More is Less*

Transcendental materialism is anything but a scientific positivism, a simplistic, narrow-minded metaphysics in which only physically present matter-in-motion in the *hic et nunc* is admitted as real. In relation to the topic of “privative causality” from Locke to Kant, Hegel, and beyond, it acknowledges the real causal efficacy of absences, conflicts, gaps, lacks, and the like. That is to say, negativities (first and foremost, those associated with the *Cogito*-like subject) are actual causal agencies internal to the lone plane of material being(s). These privations and their palpable effects must be reckoned with even by a materialism allied to the sciences—and this despite the natural sciences’ unfortunate and problematic spontaneous positivist inclinations uncritically to abhor a void, as it were.

Although transcendental materialism affirms rather than denies the reality of negativity, this position, as a proper materialism, upholds a material as opposed to a mystical account of it. The latter tends to predominate in those philosophies likewise treating negativities as ontologically real, from the Christian Pico della Mirandola in the Renaissance to Agamben *et al* in the far from atheistic status quo. The obscurantism of these kinds of accounts past and present consists in appeals to the unexplained explainer of the supposed factual givenness of an always-already operative Nothing at or as the heart and soul of subjectivity (if not Being overall). In terms of its genetic origins (whether ontogenetically or phylogenetically speaking), this enigmatic, opaque Void

comes from a mysterious God-knows-where. With reference to Sellars' seminal 1956 essay "Empiricism and the Philosophy of Mind," mysticisms of the negative might be said to rely on "the myth of the non-given," namely, the non-givenness of the Nothing/Void as itself a purportedly elementary, rock-bottom given.

By contrast, a material account of negativity begins with the recognition of the need both, first, to ask the question of the dual, interlinked phylogenetic and ontogenetic origins of Nothing(ness)/Void(edness) as well as, second, to answer this question in a strictly materialist manner (i.e., without surreptitious spiritualist cheating through covert recourse to presuppositions and posits involving entities and events utterly inexplicable in relation to the realities of matter and nature). In tandem with conceiving of phylogeny and ontogeny within a hybrid Darwinian, Marxian, and Freudian-Lacanian framework, transcendental materialism's non-mystical theory of "things" negative rests on a principle of "more is less" (to invert a cliché). The "plus" of an unguided, accidental accretion of contingent material components and constituents over time has the potential to give rise to increasing degrees of complexity in the forms of systems taking shape in and through cross-resonating relations between these accumulating material components and constituents (this indeed has happened in the natural and non-natural histories behind the reality containing human beings as they actually are). Above certain thresholds, such complexity, produced by nothing magically inexplicable in natural or material terms, immanently generates out of itself, in a self-subverting, short-circuiting process, the "minus" of causally efficacious antagonisms, bugs, clashes, dysfunctions, rifts, splits, and so on (i.e., negativities) within and between the contributors to complexity. Put

differently, the “more” of a surplus of positive parts yields, in a real dialectical dynamic, the “less” of a deficit of balanced, harmonious coordination in the forms of negative structures and phenomena bound up with absences, conflicts, gaps, and lacks perturbing both natural and denaturalized material realities from within. The negativity of the *Cogito*-like subject can and should be explained materially, rather than unexplained mystically, the latter being the idealist mirror image of the pre/non-dialectical materialist explaining-away peddled by mechanistic, reductive, and eliminative *Weltanschauungen*.

IX. The Meta-Transcendental Necessary Conditions of Substance as Weak Nature:

Underdetermination, Complexity, and Anorganicity

This “latest system-program of German idealism” (i.e., transcendental materialism), in which substance is thought as subject and vice versa, requires for its satisfactory establishment both a transcendentalism of subjectivity (as the sufficient conditions for there really being autonomous subjects) and a meta-transcendentalism of substantiality (as the necessary conditions for this). Regarding meta-transcendental necessary conditions, transcendental materialism, as also a carefully qualified (quasi-)naturalism, envisions a “weak nature” alone as the ground-zero of its ontology. In combined Lacanian, Badiouian, and Žižekian vocabularies, the natural does not amount to Nature-with-a-capital-N as the One-All of another big Other, whether as a flawlessly coordinated clockwork mega-machine (as per Laplace’s demon and mechanistic materialism) or a (w)holistic cosmic super-organism (as per Romantic-style organicisms, including the more Romantic and Spinozist sides of Schellingian *Naturphilosophie*). Instead of being a

grand Totality seamlessly self-integrated and consistent with itself (i.e., “strong”), the *Grund als Ur/Un-Grund* of the Otherless expanse of the natural is “weak” *qua* fragmentary and inconsistent, shot through with irreducible negativities thwarting any totalizing synthesis of the field of innumerable material beings. In addition to the ontological insights of Lacan, Badiou, and Žižek, Hegel’s hints about the *Ohnmacht der Natur*, McDowell’s “naturalism of second nature,” and Cartwright’s “dappled world” (as per a “nomological pluralism” arrived at via an ontologization of Hume’s epistemological analyses of causality) are key ingredients of this reconceptualization of nature in which its imagined strength is subtracted from it (specifically its deterministic power presumably exerted through a network of exhaustively interconnected efficient causes as inviolable, iron-clad laws).

What is meant here by the weakness of nature can be best appreciated starting with reference to human beings. Such beings are the progeny of natural history, of evolutionary processes as temporally elongated jumbles of contingencies-without-teleologies in which the sole minimal requirement for living entities ultimately is “good enough to survive long enough to reproduce” (hardly a recipe promising the outcome of maximally optimized functionality—as a German saying has it, *Dumm kann ficken*). Of course, this history happens to have eventuated in human animals as highly complex organisms. Along the lines of a non-mystical account of negativity, the bio-material complexity of humans crosses a tipping point beyond which these organisms no longer are completely organic *qua* wholes whose parts are smoothly orchestrated and frictionlessly synchronize with each other. As per the “kludge” model of the central

nervous system, discrepancies and tensions can and do arise within and between the complexes of components and sub-components of humans' incredibly intricate anatomies and physiologies (in Lacanese, the barred corpo-Real of brains-and-bodies-in-pieces). Human beings are instances in which, just as the organic emerges from the inorganic, the "anorganic" emerges from the organic. The anorganic is not here the inorganic (i.e., the physics and chemistry of the non-living), but, rather, the negativities (as discordances, glitches, etc.) generated in and by the organic's intricacy-induced auto-disruptions. In more sweeping language, humanity is the product of a self-denaturalizing nature (as a Hegelian-type self-sundering substance). Human creatures are the children of evolution and genetics as uncaringly indifferent and laxly underdetermining parents. These old authorities are too feeble and divided against themselves to prevent or squelch their offsprings' phylogenetic and ontogenetic rebellions, to block or crush the runaway cultural revolutions launching denaturalized histories as internal yet irreducible transcendences-in-immanence with respect to natural history itself. Without the weakness of (in)substantial nature, as a material meta-transcendental necessary condition for more-than-material transcendental subjects, there could be no exceptions to natural heteronomy. In other words, if the natural were stronger, really existing human subjectivity in all its distinctiveness could not have arisen in the first place.

The complexity-triggered dialectical logic of "more is less" holds for the cultural as well as the natural, for the Symbolic register of the historical, linguistic, and social as well as the Real register of the evolutionary, genetic, and organic. Hence, not only is nature underdetermining by virtue of its impotence (as anorganicism, kludginess, etc.)—

so too is the nurture of collective structures. According to the more-is-less principle, sufficiently elaborate systems both natural and non-natural inevitably come to harbor internally generated loopholes, namely, intra-systemically produced null zones as SNAFU extimacies (to borrow one of Lacan's better-known neologisms, with "extimacy" designating intimate externality or internal exclusion). At such exceptional points of extimacy, these systems, thanks to their multifaceted intricacies, unintentionally suspend their own laws and commands, thereby creating system-immanent grey areas in which things can happen otherwise than as would be dictated by the rules and regulations of default systemic business as usual. In an inversion of Althusserian interpellation, in which a strong system irresistibly determines its addressees to be heteronomous subjects *qua* subjected to it, the possibility of a subjectification achieving autonomy from both nature and nurture arises from events of simultaneous encounters with two overlapping voids: the negativity of a barred Real plus that of a barred Symbolic.

*X. The Transcendental Sufficient Conditions of Subjectivity as Strongly Emergent:
Epigenetics, Plasticity, and the Downward Causation of Recursion*

Transcendental materialism consists not only of an ontology of meta-transcendental substance, but also a meta-physics of transcendental subjectivity. In this particular philosophical apparatus, the theory of being delineates the necessary (but not sufficient) conditions for the theory of the subject, a subject transcendent(al)-while-immanent to this same being as a dialectical-speculative identity-in-difference. However, by contrast with certain versions of dialectical materialism, the strongly emergent subject of

transcendental materialism can and does achieve, at least from time to time, full-fledged independence from its ontological-material grounds (i.e., its meta-transcendental necessary conditions). This subject introduces irreparable breaks in being resistant to any and every kind of synthesizing sublation. But, what are the sufficient conditions for such transcendent(al) subjects within this specific materialist framework?

As hinted a moment ago, a strong variant of emergentism is a key component of a transcendental materialist theory of subjectivity. If emergences of a peculiar type and of sufficient strength do happen—these would have to involve what emergence theorists, cognitive scientists, and Analytic philosophers of mind designate as the power of “downward causation” in which “higher” emergent levels and layers react back on “lower” ones—then there indeed are the sorts of subjects affirmed by this anti-reductive/eliminative materialism as an updated “Spinozism of freedom.” Two more variables are bound up with transcendental materialism’s version of emergentism: one, the epigenetics and plasticity of the human central nervous system as inextricably entangled with and suffused by extended exogenous matrices of mediation both natural and non-natural (what certain Analytic philosophers have taken to calling the “extended brain/mind”); and, two, processes through which this entanglement of human minded bodies with external networks both natural and non-natural, rather than remaining matters of heteronomous (over)determination by externalities, give rise to recursive structures and dynamics through which loci of ideational/representational reflexive self-relatedness (as the skeletal scaffoldings of subjectivity proper) establish themselves as autonomous *vis-à-vis* nature, nurture, or any combination thereof (this having to do with responses

catalyzed by inverse interpellations coming from both the Real and the Symbolic as each barred). A systematic account of these multiple forces and factors arguably would amount to thinking substance as subject and vice versa.

XI. The Wagers of a Materialism of Freedom

One of the great virtues of Badiou's philosophy has to do with how he situates himself with respect to his three acknowledged twentieth-century French "masters": Sartre, Althusser, and Lacan—in particular, his interfacing of a Sartrean existentialism of autonomy with an Althusserian structuralism of heteronomy, an interfacing significantly foreshadowed by Lacanian psychoanalysis. In the language of Schelling's 1809 *Freiheitschrift*, Badiou seeks to combine Sartre's "freedom" (represented by Kant and Fichte for Schelling) and Althusser's "system" (represented by Spinoza for Schelling). The very beginning of Badiou's philosophical project reflects Sartre's lasting influence. With reference to Badiou's concept of a "point" (i.e., a locus or node at which, in resonance with the Sartrean "condemnation to freedom," a choice is forced between two divergent forks: yes or no, left or right, persist or desist, etc.), philosophy gets well and truly underway, for Badiou, with the answering, in the form of system-founding axioms, of unavoidable point-like questions (such as the Parmenidean-Platonic, "Being, One or Many?"). The axiomatic, load-bearing pillars of such a systematic philosophical edifice are erected as consequences of radically free responses to certain ultimate and inevitable queries compelling groundless/self-grounding decisions constituting the grounding intuitions of a philosophy made possible on their basis. But, such a philosophy beginning

thusly is no less systematic for all that: Badiou absorbs key lessons from existentialism without succumbing to its irrationalist tendencies to denounce classical system-building. The preceding ten theses of transcendental materialism as a system are precisely its point-prompted axioms.

In the same vein, the full arc of Badiou's *Being and Event*, the 1988 book establishing the core of his mature philosophy, fairly can be depicted as constructing the virtuous circle of a self-grounding trajectory. The Sartrean-style autonomous acts that launch the first half of the book (the "being" part of its ontology) are retroactively justified, explained *après-coup*, by the second half of the book (the "event" part, involving a theory of the subject as immanent yet irreducible to "being *qua* being" [*l'être en tant qu'être*]). As per this reading of *Being and Event*, a reading which informs the relation between the theses and the system of transcendental materialism, only a systematic ontology of freedom (as non-contemplative and implacably hostile to reductivism and epiphenomenalism) can be truly self-grounding through including within itself an account of the groundless ground of the autonomy making possible any and every philosophy's obligatory beginnings with a philosopher-subject's freely decided upon axioms, intuitions, and theses (including even those philosophies denying such autonomy).

Related to the preceding, Badiou's vision of philosophy as called to think the "compossibility" of the truths of its time produced in the domains of its four extra-philosophical "conditions" (i.e., art, love, politics, and science) also reflects certain existentialist sensibilities—ones tracing back, in this case, to Pascal (not to mention its

resonances with the preface to Hegel's 1821 *Elements of the Philosophy of Right*). In fact, the above-mentioned free choices of responses to pointed, unavoidable *Ur*-questions are shaped by the philosopher's relations to these conditions and the cross-resonances between the artistic, amorous, political, and scientific events and truths he/she opts to recognize. To be more exact, philosophy *à la* Badiou is duty-bound to gamble on aspects of its extra-philosophical sources in conjunction with placing the bets that establish its axiomatic theses. Moreover, as with Pascal's famous wager, there are no safe, neutral, non-committal positions relative to the points of interrogation making it always-already the case for any philosophy that it asks and answers certain fundamental questions, however implicitly or explicitly. For Pascal, agnosticism, as not choosing to believe in God, is really tantamount to atheism, as choosing not to believe in God. In Pascal's wager, as in the Sartrean existentialism indebted to it, not choosing is itself a choice, not acting is itself an action. Likewise, according to Badiou's conception of the founding grounds of each and every philosophy, the philosopher is forced freely to decide, however consciously or unconsciously, on what and what not to be conditioned by in terms of what is transpiring around him/her in the more-than-philosophical realms of art, love, politics, and science. Arguably, not deciding to be conditioned by given artistic, amorous, political, and/or artistic events and truths is deciding not to be conditioned by them. Or, when it comes to laying one's philosophical foundations (as with so much else), *omnis determinatio est negatio*, to put this in a hybrid Spinozist-Hegelian phrasing.

Of Badiou's four conditions, science is especially important for the foundations of his post-1988 philosophical system insofar as it furnishes him with the skeletal

scaffoldings for both his ontology and phenomenology in the forms of the mathematical sciences of set theory and category theory respectively. Well aware that he is gambling, he commits to wagering on select events in mathematics starting with Cantor's infinitization of infinity itself as irreparable ruptures in the history of thought demanding philosophical reckonings. By contrast with the formalist rationalism of Badiouian metaphysics as a "materialist dialectic," transcendental materialism, diverging from Badiou's Koyré-inspired limiting of the scientific to the (purely) mathematical, places some of its make-or-break bets on natural (rather than formal) sciences. Transcendental materialism's wagers on biology are just as essential to it as Badiou's wagers on transfinite set theory are for his interlinked ontology and theory of subjectivity. Although differing from each other as regards their conceptions of scientificity, these two approaches share a belief in the necessity of risking philosophical engagement with and reliance upon extra-philosophical sciences (and other disciplines and practices too).

Nothing guarantees that these wagers will not be problematized in the future. But, equally, nothing guarantees that they will be either. Opting to believe in the historical impermanence of scientific propositions, in the supposed inevitability of them being overturned and surpassed sooner or later, is as much an article of dogmatic faith as the most naïve, uncritical belief in the unquestionable universal validity of whatever happens to count as present-best science. The false security of a non-committal agnosticism *vis-à-vis* the sciences refusing to place any bets whatsoever on these more-than-philosophical disciplines justifies itself on the basis of this aforementioned belief in the finitude of all purported discoveries and facts scientific. But, especially for ostensibly

materialist philosophies, not only is such an agnosticism in actual danger of present and future in consequence and irrelevance measured by the standard of philosophy having to be “of its time” (as per both Hegel and Badiou)—it quickly runs aground into the barren, sterile dead end of subjectively idealist skepticism. The prices to be paid for the illusory safety of this cautious, unconfident, and fatalistic *attentisme* are abandonment of a vital aspect of philosophy’s vocation as well as renunciation of any legitimate claim to being materialist. In short, philosophical materialism cannot afford not to take its chances.